# 2000 | 2001

Environmental Commissioner of Ontario

# ANNUAL REPORT

# HAVING REGARD

E C O

C E O

**Production Notes**

Paper – Rolland Opaque New Life
30% recycled from post-consumer fiber
100% elemental chlorine-free
Printed with vegetable-based inks
Recyclable

# ERRATA

**Environmental Commissioner of Ontario**
**2000/2001 Annual Report**

**Please note that an error has been made in the page numbers listed at the end of articles referring to Ministry Comments in Appendix A. The actual page numbers vary two or three page numbers from the references in the text of the report. The correct page numbers are as follows:**

| Article | Ministry Comments |
|---|---|
| | Page |
| Statements of Environmental Values and Business Plans | 182 |
| Instruments | 183 |
| Quality and Availability of Information | 184 |
| Unposted Decisions | 185 |
| Information Notices | 186 |
| Exception Notices | 187 |
| Hazardous Waste | 187 |
| Management of Septage and Sewage Sludges | 188 |
| Transportation and Land Use Planning for the GTA | 190 |
| Air Issues Update | 192 |
| Compliance and Enforcement at MOE | 193 |
| Provincial Groundwater Strategy | 195 |
| Compliance with the 3R Regulations | 196 |
| Canada-Wide Standards for Particulate Matter and Ozone | 197 |
| Toughest Environmental Penalties Act | 198 |
| Regulatory Improvements for Hazardous Waste Management | 198 |
| Emission Reporting Regulation for Electricity Generators | 200 |
| Drinking Water Protection Regulation | 200 |
| Presqu'ile Provincial Park Management Plan | 201 |
| New Fishing Regulations for the Northwest Region | 201 |
| Marshfield Woods | 201 |
| Bill 42: The Technical Standards and Safety Act | 202 |
| The *Mining Act*: Part VII Regulation and the Mine Rehabilitation Code | 202 |
| Changes to Ontario Regulation 82/95 – Minimum Energy Efficiency Levels | 203 |
| Need for Action | 203 |
| Protecting the Oak Ridges Moraine | 204 |
| Protecting the Mellon Lake Conservation Reserve | 204 |
| Safety-Kleen | 205 |
| Fisheries Act Contraventions | 206 |
| Ministry Implementation of 1999/2000 ECO Recommendations | 207 |
| Cooperation from Ontario Ministries | 210 |
| Prescribing the Ministry of Education Under the *EBR* | 210 |
| Cage Aquaculture | 211 |
| A Review of Ontario's Land Acquisition Program | 211 |

Environmental
Commissioner
of Ontario

Commissaire à
l'environnement
de l'Ontario

Gord Miller, B.Sc., M.Sc.
Commissioner

Gord Miller, B.Sc., M.Sc.
Commissaire

September 2001

The Honorable Gary Carr
Speaker of the Legislative Assembly
Room 180, Legislative Building
Legislative Assembly
Province of Ontario
Queen's Park

Dear Mr. Speaker:

In accordance with Section 58 of the *Environmental Bill of Rights, 1993*, I am pleased to present the 2000/2001 annual report of the Environmental Commissioner of Ontario for your submission to the Legislative Assembly of Ontario.

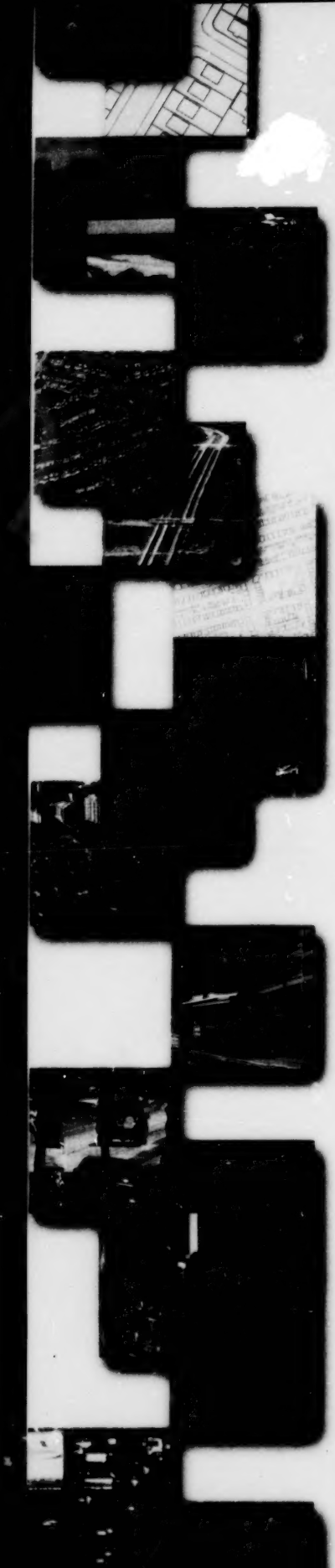
Sincerely,

Gord Miller
Environmental Commissioner of Ontario

1075 Bay Street, Suite 605
Toronto, Ontario M5S 2B1
Tel: 416-325-3377
Fax: 416-325-3370
1-800-701-6454

E C O
C E O

1075, rue Bay, bureau 605
Toronto (Ontario) M5S 2B1
Tel : 416-325-3377
Telec : 416-325-3370
1-800-701-6454



# Table of Contents


**A Message from the Environmental Commissioner** 4

**Highlights of the 2000/2001 Report to the Legislative Assembly** 8

**Part 1:** The *Environmental Bill of Rights* **16**

Statements of Environmental Values and Business Plans .....18
Instruments .....19
ECO Educational Initiatives .....22

**Part 2:** The Environmental Registry **24**

Quality and Availability of Information .....26
Unposted Decisions .....33
Information Notices .....37
Exception Notices .....40
Late Decision Notices: Excessive Time Used to Post Instrument Decision Notices on the Registry .....42

**Part 3:** Significant Issues **44**

Hazardous Waste .....44
Management of Septage and Sewage Sludges .....48
Transportation and Land Use Planning for the GTA .....57
Air Issues Update .....65
Compliance and Enforcement at MOE .....72
Updates: Provincial Groundwater Strategy .....84
Rehabilitating the Abandoned Kam Kotia Mine .....89
Compliance with the 3R Regulations .....91

**Part 4:** Ministry Environmental Decisions **98**
Canada-Wide Standards for Particulate Matter and Ozone .....99
*Toughest Environmental Penalties Act* .....101
Regulatory Improvements for Hazardous Waste Management ..103
Emission Reporting Regulation for Electricity Generators .....107
Drinking Water Protection Regulation .....110
Presqu'ile Provincial Park Management Plan .....113
New Fishing Regulations for the Northwest Region .....114
Marshfield Woods .....116
Bill 42: The *Technical Standards and Safety Act* .....120
The *Mining Act*: Part VII Regulation and the Mine Rehabilitation Code .....122
Changes to Ontario Regulation 82/95 Minimum Energy Efficiency Levels .....125
Need for Action .....127

**Part 5:** Reviews and Investigations **130**
Protecting the Oak Ridges Moraine .....132
Protecting the Mellon Lake Conservation Reserve .....135
Safety-Kleen .....139
*Fisheries Act* Contraventions .....144

**Part 6:** Appeals, Lawsuits and Whistleblowers **146**

**Part 7:** Ministry Progress **152**
Ministry Implementation of 1999/2000 ECO Recommendations ..152
Cooperation from Ontario Ministries .....160
ECO Recognition Award .....162

**Part 8:** Developing Issues **164**
Prescribing the Ministry of Education under the *EBR* .....165
Cage Aquaculture .....167
A Review of Ontario's Land Acquisition Program .....171

**Part 9:** Financial Statement **178**

**Part 10:** Summary of Recommendations **181**

**Appendix A:** Ministry Comments **182**

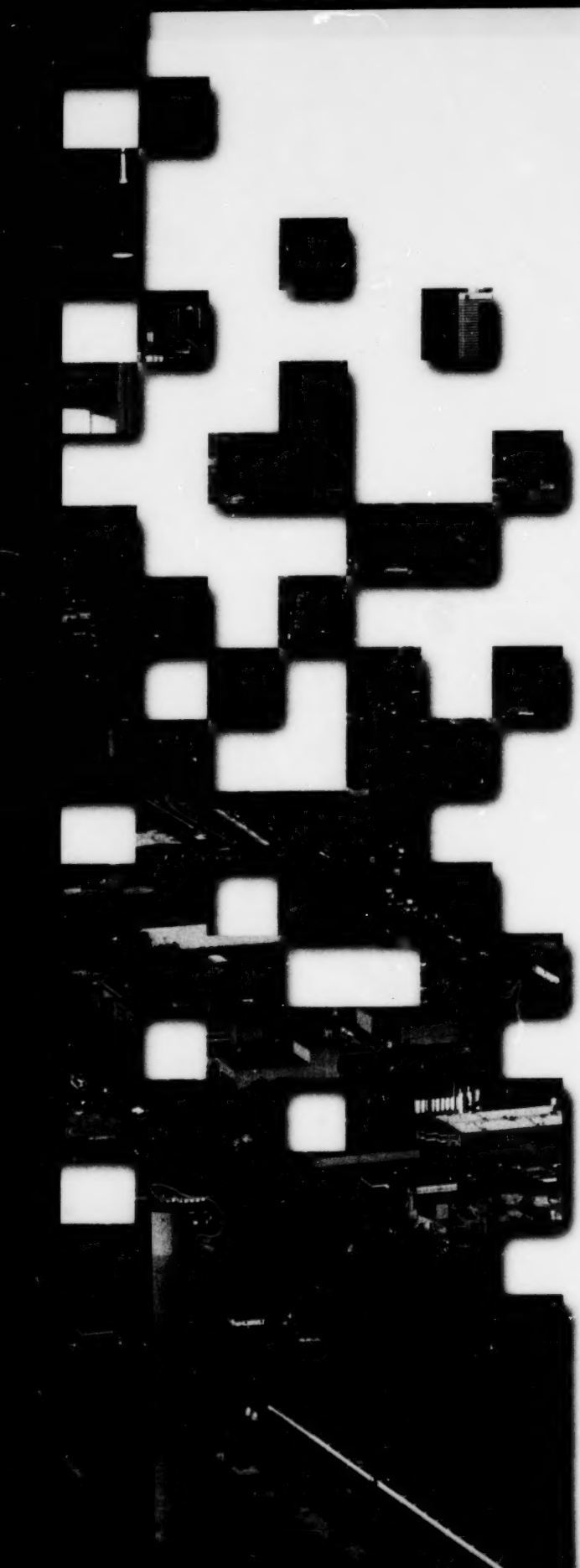
**Abbreviations and Acronyms** **214**

**Index** **216**

Glossary

See the ECO website at www.eco.on.ca

HAVING REGARD



# Message from the Environmental Commissioner of Ontario

## Having Regard

In the past year environmental issues have moved to centre stage in public policy debates. Triggered by the terrible tragedy at Walkerton, there has, understandably, been a strong focus on drinking water. But public concern over a range of other environmental problems has erupted. As a result, the year 2000/2001 was the busiest year yet for the office of the Environmental Commissioner.

It is evident that the original vision of the crafters of the *Environmental Bill of Rights (EBR)* is being realized. The public is no longer willing to place environmental decision-making solely in the hands of others. Citizens are increasingly using their right to participate in government decision-making about the environment, and they are holding government accountable through appeals, requests for reviews and for investigations under the *EBR*. I believe that this bodes well for the long-term protection of Ontario's environmental quality.

This report reviews the activities of the prescribed provincial ministries, the public and my office related to the *Environmental Bill of Rights* for the period from April 1, 2000,to March 31, 2001. When reading the report this year, one has to keep in mind that there have been a substantial number of developments and initiatives that have occurred between the end of the reporting period and the release date of this report in the fall of 2001. The fact that the environmental protection policy area is changing so rapidly during these times is, I think, a positive development.

This year's report is entitled "Having Regard." The term is familiar to people involved in environmental pursuits. It's a controversial phrase from Section 3 of the *Planning Act* that states that provincial and municipal agencies involved in land-use planning "shall have regard to" the Provincial Policy Statements. The controversy arose because some years ago it was suggested in a court ruling that having regard to those policies did not mean there was a mandatory obligation to follow them. It only meant that a decision-making body couldn't dismiss the provincial policies out of hand. Subsequently, the wording of Section 3 was changed to "shall be consistent with." Later, when this was perceived to be too inflexible, the new government changed the wording back to "shall have regard."

Despite the controversy, "having regard" is an interesting phrase to ponder in view of what is happening to our land, especially in highly developed southern Ontario. It has now been confirmed that land use practices had a significant role in the Walkerton tragedy. The *E. coli* from cattle manure on an adjacent farm somehow found its way into the aquifer and then the wells. Several other environmental issues in this report are also essentially land use concerns. The land disposal of biosolids, transportation planning, the fate of Marshfield Woods, and, of course, the debate over the Oak Ridges Moraine all highlight the environmental tensions that are developing from our changing relationship with the land.

The days when we had an abundance of rural land to use for any purpose are over. We are increasingly in conflict with the capability of the land to support the demands we place on it. We are frequently unhap-

py that our lifestyles are being compromised by competing land uses. We are frustrated that we no longer have the aesthetically pleasing landscape we want. What we thought were "urban" environmental problems have intruded into rural lifestyles and now we are even being asked to restrict our water use.

These frustrations and conflicts will continue to get worse until we change our way of thinking about the land. We must accept that there are limits to the growth and development we can place on the landscape beyond which there will be serious damage to the ecological processes that we depend on for our quality of life. There is a "cultural carrying capacity" to our landscape. We can exceed it if we wish, but we have to be prepared to accept the consequences.

The conflict over the Oak Ridges Moraine probably best reflects this fundamental problem. That situation highlights the inability of our land use planning system to deal with the crises that arise on a landscape at or near its cultural carrying capacity. How we resolve the Oak Ridges situation will be a test of our ability to change our thinking and embrace necessary new approaches to the land.

Which brings us back to "having regard." Notwithstanding legal interpretations, having regard is the kind of terminology that captures the essence of the needed new thinking. My dictionary says that "regard" means to pay attention to, to look after, or to have care for. The synonyms for "regard" are respect, esteem and admiration. I think these definitions characterize the needed change in thinking.

Times have changed in southern Ontario. Our attitudes have to change, too. It is time to have regard to the land and its ecological processes.

Gord Miller,
Environmental Commissioner
of Ontario

# 2000/2001 Highlights of the Report of the Environmental Commissioner of Ontario

## Part 1: The *Environmental Bill of Rights*

The goals of the *Environmental Bill of Rights (EBR)* are to protect and restore the natural environment and to protect people's rights to a healthful environment. The *EBR* gives all Ontario residents the right to participate in environmental decisions made by provincial ministries. The Environmental Commissioner of Ontario (ECO) is appointed by the Legislature to monitor and report on government compliance with the *EBR* and to educate the public about their rights. . . . . **16**

## Part 2: The Environmental Registry

The Environmental Registry gives Ontarians electronic access to the government's environmentally significant proposals. The ECO identifies ministry proposals that should have been posted on the Registry for public comment but were not, such as the shut-down of the province's acid rain monitoring network, a moratorium on the sale of coal-fired generating stations, and a new

approach to provincial transportation planning. The ECO also monitors the quality of Registry notices, whether ministries post notices in a timely way, and whether proposals posted as information or exception notices should have been posted as regular notices for public comment. . . . . .24

## Part 3: Significant Issues

Each year, the ECO highlights a number of environmental issues that have been the subject of recent applications under the *EBR* or are related to recent decisions posted on the Environmental Registry. These issues include:

Hazardous Waste
Changes to Ontario's hazardous waste regulation may result in a significant increase in the quantities of wastes that must be disposed of as hazardous wastes in the province. Imports of these wastes from the U.S. are continuing to increase as well, and concerns are growing about the inadequate future capacity and environmental impacts at the only landfill facility in Ontario that receives these wastes. The ECO believes MOE should further review its overall approach to managing hazardous wastes. . . . . .44

Management of Septage and Sewage Sludges
There have been a wide range of complaints from individuals, citizens' groups and farmers about the rules – and MOE's enforcement of the rules – for applying sewage sludge and septage to farmland. These wastes contain nutrients that can contaminate waterways and may also contain live pathogens such as bacteria and viruses and trace contaminants such as heavy metals. Existing Ontario rules for applying these wastes provide no protection for groundwater recharge areas, no requirements for operator training or certification, and no prohibition against application onto frozen soil. . . . . .48

Transportation and Land Use Planning for the GTA
MTO has not provided the needed leadership for integrated transportation planning in the Greater Toronto Area, and has instead focused on a program of highway expansion that only exacerbates the related problems of air pollution and urban sprawl. Transportation planning for the GTA appears to have been handed over to the Greater Toronto Services Board, which has no fund-raising powers or explicit transportation mandate. . . . . .57

Air Issues Update
The ECO sees a need for MOE's Drive Clean program to become more transparent, with full public access to its underlying assumptions and with periodic audits to assess its effectiveness. MOE should also provide timely annual reports on Ontario's air quality and on the ministry's smog reduction efforts, using clear and consistent methods for quantifying emission reductions. . . . . **65**

Compliance and Enforcement at MOE
MOE's approach to ensuring compliance with the province's environmental laws is unclear and at times inconsistent. The public is often not aware of which activities are being monitored and which environmental laws are not being enforced, and problems remain despite the recent shift from voluntary to mandatory abatement. . . . . **84**

## Part 4: Ministry Environmental Decisions

Each year the ECO reviews the environmentally significant decisions made by the provincial ministries prescribed under the *Environmental Bill of Rights*. Decisions during the 2000/2001 reporting year include the following:

Canada-Wide Standards for Particulate Matter and Ozone
MOE has agreed to adopt the Canada-wide Standards for Particulate Matter and Ozone. However, Ontario intends to meet its ozone target through its existing Anti-Smog Action Plan, which relies on voluntary measures and has had poor reporting and demonstrated slow progress. . . . . **99**

*Toughest Environmental Penalties Act*
The new *Toughest Environmental Penalties Act* increases the fines imposed on polluters, but the effectiveness of the Act will depend on whether there is enough MOE staff to enforce it. In the past, maximum fines have rarely been imposed by the courts, and the province has had difficulties in collecting them when they were. . . . . **101**

Regulatory Improvements for Hazardous Waste Management

MOE strengthened the criteria for determining which wastes are hazardous, which means that the quantities of wastes considered hazardous will increase substantially. Imports of these wastes from the U.S. continue to rise, since Ontario's requirements for treatment and disposal of hazardous wastes, which are much less stringent than in the U.S., were not changed. Ontario's only facility for landfilling these wastes has an extremely limited capacity, and public concern about the environmental and health impacts of the facility have been rising. . . . . **103**

Emission Reporting Regulation for Electricity Generators

A new regulation requiring electricity generators to monitor and report their air emissions does not require emission reductions. Although MOE says that the "public's right to know" will be an incentive for companies to reduce emissions, the monitoring and reporting framework for the electricity sector may not provide consistent, comparable emission measurements the public can use. . . . . **107**

Drinking Water Protection Regulation

A new regulation creates the first mandatory procedures for drinking water treatment and testing in Ontario, requiring constant monitoring of water quality. However, many small water distributors are not covered by it, and the regulation doesn't specify which types of alternative water treatments are acceptable. . . . . **110**

Presqu'ile Provincial Park Management Plan

In the Park Management Plan for Presqu'ile Provincial Park, Ontario Parks, a division of MNR, worked hard to strike a balance between traditional recreational uses such as waterfowl hunting and natural heritage protection. . . . . **113**

New Fishing Regulations for the Northwest Region

Changes to fishing regulations for the Northwest Region are aimed at modernizing sportfishing regulations while maintaining the area's high-quality and sustainable fisheries. . . . . **114**

Marshfield Woods

MMAH denied approval of a proposal to build a golf course in a wooded wetland in Essex County. Unfortunately, the landowner had already begun construction activities on the property, including forest removal. Considerable environmental damage has taken place, in a region which has already lost 90 per

cent of its wetlands and 97 per cent of its forest, pointing to weaknesses in Ontario's current land-use planning system and legislation. . . . . **116**

Bill 42
The *Technical Standards and Safety Act*: Under the new Technical Standards and Safety Act, the detailed safety requirements once part of the *Gasoline Handling Act* will be moved from legislation to regulations, which do not receive the same scrutiny when formulated and enacted. . . . . **120**

The *Mining Act*: Part VII Regulation and the Mine Rehabilitation Code
Amendments to the *Mining Act* have created a self-certification system for mine closure and rehabilitation plans and more flexible financial assurance provisions. Moreover, if adequate financial assurance is not required, there may not be sufficient funds if mine rehabilitation becomes necessary, as has happened many times in the past. . . . . **122**

Changes to Ontario Regulation 82/95 – Minimum Energy Efficiency Levels
A new regulation prescribes minimum energy efficiency standards for six products and updates efficiency standards for four other products, moving Ontario ahead of the federal government in this area. . . . . **125**

Need for Action
This annual report presents a list of selected proposals posted on the Environmental Registry before March 31, 2000, for which no decisions have yet been posted. The ECO urges ministries to update the public on the status of these proposals. . . . . **127**

## Part 5: Reviews and Investigations

During this reporting period, the ECO reviewed the handling of 32 applications for review and applications for investigation submitted by Ontario residents to ministries prescribed under the *EBR*. The ECO remains concerned

that reviews and investigations be completed in a timely way, and that ministries take into account all of the concerns expressed by the applicants in their responses to applications. Among those applications:

Protecting the Oak Ridges Moraine

Two applications for review under the *EBR* argued that existing land use planning laws do not protect the Oak Ridges Moraine and asked for a new law, policy or regulation to protect the Moraine, or for a moratorium on new development and a land acquisition program to purchase key properties on the Moraine. The ECO believes that the responses of MMAH, MNR, and MOE in denying the applications were inadequate, and that the ministries should have conducted the review. . . . . **132**

Protecting the Mellon Lake Conservation Reserve

An area within the Mellon Lake Conservation Reserve designated in the 1999 Ontario's Living Legacy Land Use Strategy has an existing mining tenure and thus will not be protected, even though it was clearly identified as a provincially significant natural heritage area during the planning process. Conflicts such as this – mining activities in areas the public thought were protected – may be repeated across vast areas of Ontario unless the government clarifies these public policy contradictions. . . . . **135**

Safety-Kleen

*EBR* applicants are concerned about the environmental and human health impacts of the landfill and incinerator at Safety-Kleen, the only commercial facility in Ontario licensed to landfill hazardous wastes. Declining public confidence and the lack of transparency in ministry dealings with the facility have cast doubt on the ministry's ability to regulate Safety-Kleen in the interests of the public. . . . . **139**

*Fisheries Act* Contraventions

MNR has released the results of its investigation of three *EBR* applications alleging that Ontario Hydro had discharged large quantities of metal contaminants into Lake Ontario, Lake Erie and the St. Clair River. The ECO is concerned with the ministry's decision not to charge Ontario Hydro under the *Fisheries Act*, since Ontario Hydro knowingly continued to release deleterious substances into the water even after the problem was discovered in 1981. . . . . **144**

## Part 6: Appeals, Lawsuits and Whistleblowers

Under the *EBR*, Ontarians have the right to appeal certain ministry decisions; to sue for damages for direct economic or personal loss because of a public nuisance that has harmed the environment; to sue if someone is breaking an environmental law; and to seek employee protection against employer reprisals for reporting environmental violations in the workplace or for using their rights under the *EBR*. . . . . **146**

## Part 7: Ministry Progress

ECO staff reviewed the progress of ministries prescribed under the *EBR* on all 21 recommendations made by the ECO in the 1999/2000 annual report. In general, the ECO found that staff at the ministries were generally cooperative in providing information when it was requested – with a few exceptions. . . . . **152**

## Part 8: Developing Issues

The ECO believes the following issues deserve attention because they may have significant environmental impacts and because they appear to be absent from the priority lists of the ministries responsible for managing those impacts.

Prescribing the Ministry of Education under the *EBR*
Even though the core mandate of the Ministry of Education is not environmental, the ECO believes it should be added to the 13 provincial ministries subject to the *EBR* since it has a key role in helping to ensure Ontario students receive a sound environmental education. . . . . **165**

Cage Aquaculture

Aquaculture carried out in a natural water body can produce large quantities of polluting wastes, killing native fish and stimulating the growth of excessive algae. The ECO believes it is essential that government ministries work together to ensure that the aquaculture industry is sufficiently regulated to protect the environment. . . . . **167**

A Review of Ontario's Land Acquisition Program

Only 2 per cent of the land mass in southern Ontario is currently protected, most of the land is privately owned, and municipalities face intense pressure to permit development. MNR land acquisition programs aimed at protecting natural areas show gaps in delivery of the overall program. A coherent, province-wide framework is needed to ensure that natural heritage areas are protected in southern Ontario. . . . . **171**

# Part I

The *Environmental Bill of Rights*

## The *Environmental Bill of Rights*

The *Environmental Bill of Rights* (*EBR*) gives the people of Ontario the right to participate in ministry decisions that affect the environment. The *EBR* helps to make provincial ministries accountable for their environmental decisions. It ensures that these decisions are made in accordance with goals all Ontarians hold in common – to protect, conserve, and restore the natural environment for present and future generations. While the government has the primary responsibility for achieving these goals, the people of Ontario now have the means to ensure they are achieved in a timely, effective, open and fair manner.

The *EBR* gives Ontarians the right to. . .

- comment on environmentally significant ministry proposals.
- ask a ministry to review a law or policy.
- ask a ministry to investigate alleged harm to the environment.
- appeal certain ministry decisions.
- take court action to prevent environmental harm.

## Statements of Environmental Values

Each of the ministries subject to the *EBR* has a Statement of Environmental Values (SEV). The SEV guides the minister and ministry staff when they make decisions that might affect the environment.

M121

IMPORTANT NOTE CONCERNING THE FOLLOWING PAGES

THE PAGES WHICH FOLLOW HAVE BEEN FILMED TWICE IN ORDER TO OBTAIN THE BEST REPRODUCTIVE QUALITY

USERS SHOULD CONSULT ALL THE PAGES REPRODUCED ON THE FICHE IN ORDER TO OBTAIN A COMPLETE READING OF THE TEXT.

---

REMARQUE IMPORTANTE CONCERNANT LES PAGES QUI SUIVENT

LES PAGES SUIVANTES ONT ÉTÉ REPRODUITES EN DOUBLE AFIN D'AMÉLIORER LA QUALITÉ DE REPRODUCTION

LES UTILISATEURS DOIVENT CONSULTER TOUTES LES PAGES REPRODUITES SUR LA FICHE AFIN D'OBTENIR LA LECTURE DU TEXTE INTÉGRAL

micromedia
a division of IHS Canada

20 Victoria Street
Toronto, Ontario M5C 2N8
Tel.: (416) 362-5211
Toll Free: 1-800-387-2689
Fax: (416) 362-6161
Email: info@micromedia.on.ca

Each SEV should explain how the ministry will consider the environment when it makes environmentally significant decisions, and how environmental values will be integrated with social, economic and scientific considerations. Each minister makes commitments in the ministry's SEV that are specific to the work of that particular ministry.

## What is the Role of the Environmental Commissioner?

The Environmental Commissioner of Ontario (ECO) is an independent officer of the Legislative Assembly and is appointed for a five-year term. The Commissioner reports annually to the Legislative Assembly – not to the governing party or to a ministry.

In the annual reports to the Legislature, the Environmental Commissioner reviews and reports on the government's compliance with the *EBR*. The ECO and staff carefully review how ministers exercised discretion and carried out their responsibilities during the year in relation to the *EBR*. They review whether applications from the public requesting ministry action on environmental matters were handled appropriately, and whether ministry staff complied with the procedural and technical requirements of the law. The ECO also monitors whether the actions and decisions of a provincial minister were consistent with the ministry's Statement of Environmental Values and with the purposes of the *EBR*.

The Environmental Commissioner and ECO staff assess how ministries use public input to draft new environmental Acts, regulations and policies, and how ministries investigate reported violations of Ontario's environmental laws. Each year the ECO also reviews the use of the Environmental Registry, monitors appeals and court actions under the *EBR*, and reviews the use of *EBR* procedures to protect employees who experience reprisals for "whistle-blowing."

Ministries Prescribed Under the *EBR* (September 2001)*

- Agriculture, Food and Rural Affairs (OMAFRA)
- Consumer and Business Services (MCBS)
- Economic Development and Trade (MEDT)
- Energy, Science and Technology (MEST)
- Environment (MOE)
- Health and Long-Term Care (MOHLTC)
- Labour (MOL)
- Management Board Secretariat (MBS)
- Municipal Affairs and Housing (MMAH)
- Natural Resources (MNR)
- Northern Development and Mines (MNDM)
- Tourism, Culture and Recreation (MTCR)
- Transportation (MTO)

* In February 2001, the Ontario Government announced the reorganization of one ministry under the *EBR*, and changed the name of another. The Culture and Recreation portfolios were transferred to the newly created Ministry of Tourism, Culture and Recreation. These two portfolios were previously part of the Ministry of Citizenship, Culture and Recreation. The Ministry of Consumer and Commercial Relations was renamed the Ministry of Consumer and Business Services. For the sake of clarity, this annual report uses the new ministry names.

Each SEV should explain how the ministry will consider the environment when it makes environmentally significant decisions, and how environmental values will be integrated with social, economic and scientific considerations. Each minister makes commitments in the ministry's SEV that are specific to the work of that particular ministry.

## What is the Role of the Environmental Commissioner?

The Environmental Commissioner of Ontario (ECO) is an independent officer of the Legislative Assembly and is appointed for a five-year term. The Commissioner reports annually to the Legislative Assembly – not to the governing party or to a ministry.

In the annual reports to the Legislature, the Environmental Commissioner reviews and reports on the government's compliance with the *EBR*. The ECO and staff carefully review how ministers exercised discretion and carried out their responsibilities during the year in relation to the *EBR*. They review whether applications from the public requesting ministry action on environmental matters were handled appropriately, and whether ministry staff complied with the procedural and technical requirements of the law. The ECO also monitors whether the actions and decisions of a provincial minister were consistent with the ministry's Statement of Environmental Values and with the purposes of the *EBR*.

The Environmental Commissioner and ECO staff assess how ministries use public input to draft new environmental Acts, regulations and policies, and how ministries investigate reported violations of Ontario's environmental laws. Each year the ECO also reviews the use of the Environmental Registry, monitors appeals and court actions under the *EBR*, and reviews the use of *EBR* procedures to protect employees who experience reprisals for "whistle-blowing."

Ministries Prescribed Under the *EBR* (September 2001)*

- Agriculture, Food and Rural Affairs (OMAFRA)
- Consumer and Business Services (MCBS)
- Economic Development and Trade (MEDT)
- Energy, Science and Technology (MEST)
- Environment (MOE)
- Health and Long-Term Care (MOHLTC)
- Labour (MOL)
- Management Board Secretariat (MBS)
- Municipal Affairs and Housing (MMAH)
- Natural Resources (MNR)
- Northern Development and Mines (MNDM)
- Tourism, Culture and Recreation (MTCR)
- Transportation (MTO)

* In February 2001, the Ontario Government announced the reorganization of one ministry under the *EBR*, and changed the name of another. The Culture and Recreation portfolios were transferred to the newly created Ministry of Tourism, Culture and Recreation. These two portfolios were previously part of the Ministry of Citizenship, Culture and Recreation. The Ministry of Consumer and Commercial Relations was renamed the Ministry of Consumer and Business Services. For the sake of clarity, this annual report uses the new ministry names.

## Statements of Environmental Values and Business Plans

Under the *Environmental Bill of Rights*, Ontario ministries have the primary responsibility of protecting, conserving and restoring the integrity of the environment, and protecting the right of Ontarians to a healthful environment. The Statement of Environmental Values (SEV) is a contract that provincial ministries make with the people of Ontario in recognition of these responsibilities under the *EBR*. When ministries fail to integrate their SEV commitments into their Business Plans – the key guidance documents for informing the public of ministry-specific work – they are not upholding their side of the contract.

Each prescribed ministry is required under Section 11 of the *Environmental Bill of Rights* to take every reasonable step to ensure that the ministry Statement of Environmental Values is considered whenever decisions that might significantly affect the environment are made in the ministry.

Despite repeated urging from the ECO, Ontario ministries have failed to integrate their SEVs into their Business Plans in a consistent way. The failure to give a public account of how SEV commitments are considered when a ministry makes decisions represents a failure to uphold the spirit of the *EBR*, if not its legal requirements. The reporting year 2000/2001 marks the fifth consecutive year that Ontario ministries have failed to incorporate environmental values into their Business Plans.

The ECO's internal examination of ministry Business Plans revealed that the following eight ministries did not adequately integrate their SEV principles and commitments into the main body of their Business Plans:

- Ministry of Transportation
- Ministry of Citizenship, Culture and Recreation
- Ministry of Consumer and Commercial Relations
- Management Board Secretariat
- Ministry of Health and Long-Term Care
- Ministry of Labour
- Ministry of Agriculture, Food and Rural Affairs
- Ministry of Economic Development and Trade.

The five remaining ministries integrated some level of SEV commitments into the body of their Business Plans.

These concerns of the ECO have recently been echoed by the Ontario Centre for Sustainability (OCS) in its October 2000 report, *Missing Values 2000: Ontario's Failure to Plan for a Healthy Environment*. The report concluded that nine of the 13 prescribed ministries' Business Plans failed to give adequate consideration to environmental values. The remaining four, according to OCS, received a caution based on the partial incorporation of environmental values into their Business Plans. Both the ECO and OCS agree in their primary conclusion: in 2000, no Ontario ministry demonstrated a consistent and thorough integration of environmental values in keeping with the intent and purpose of the *EBR*.

Several of the ministries' Business Plans make superficial mention of SEV commitments in the "Key Commitments" section of the document. However, the ECO encourages all ministries to make explicit reference to their respective SEVs in their core business areas, and to articulate these commitments as performance measures, goals and overall key commitments.

The ECO will continue to monitor the integration of SEV commitments into public reports of ministry progress.

*For ministry comments, see page 185.*

## Instruments

### What are instruments?

Instruments are legal documents that Ontario ministries issue to companies and individuals granting them permission to undertake activities that may adversely affect the environment, such as discharging pollution into the air, taking large quantities of water, or mining for aggregates. Instruments include licences, orders, permits and certificates of approval.

### Classifying Instruments

Under the *Environmental Bill of Rights*, certain ministries must classify instruments they issue into one of three classes according to how environmentally significant they are. A ministry's instrument classification regulation is important for Ontario residents wishing to exercise their rights under the *EBR*. The classification of an instrument determines whether a proposal to grant a license or approval will be posted on the Environmental Registry. It also determines the level of opportunity for public participation in the decision-making process, whether through making comments or applying for appeals, reviews or investigations under the *EBR*. If instruments are not classified, they are not subject to the *EBR* notice and comment provisions. Moreover, if instruments are not classified, the public cannot seek leave to appeal when they are issued, or request an investigation into allegations regarding violations of instruments or reviews of instruments. This is why a ministry's instrument classification regulation is important for Ontario residents wishing to exercise their rights under the *EBR*.

### Statement of Environmental Values (SEV)

Before making any environmentally significant decisions, ministries are mandated by Section 11 of the *EBR* to consider their Statements of Environmental Values. Section 11 applies to all environmentally significant decisions and not just to classified instruments. Values outlined in the ministry SEV are not meant to preempt any other considerations, rather they are meant to be considered in conjunction with social, scientific and economic considerations that may influence a decision. The role of the ECO is to review how a ministry considered its SEV in making a particular decision.

In 1995, the Ministry of the Environment advised the ECO that MOE staff were not required to consider the ministry's SEV when making decisions on instruments because its SEV is considered in the development of MOE policies, Acts and regulations. Considering it again for the granting of instruments is unnecessary, according to the ministry. This rationale for MOE's lack of consideration of its

SEV is not in keeping with the intention of the *EBR*. Also, it is incorrect to assert that MOE policies, Acts and regulations were developed with SEV consideration, since most of them predate the existence of the *EBR*. By excluding proposals for instruments from SEV consideration, MOE removed more than 95 per cent of its environmentally significant decisions from the SEV consideration requirement. MOE should explicitly subject all of its environmentally significant instrument decisions to SEV consideration and ensure that this is documented.

### Ministry of Natural Resources

The *EBR* requires ministries to develop a regulation outlining how the various instruments they administer will be classified within a reasonable time after a certain date that was set out in a regulation under the *EBR*. The date set for the Ministry of Natural Resources was April 1, 1996. By the end of this reporting period, and in spite of working on its instrument classification process for more than five years, MNR had not yet fulfilled its *EBR* obligation to finalize a regulation that would classify the environmentally significant instruments under the various Acts it administers. MNR has circulated two proposals for an instrument classification regulation, the first issued in March 1997, and the second issued in November 1997, with a comment period ending in January 1998.

The ECO inquired as to the status of MNR's instrument classification regulation in September 2000 and again in March 2001. The ECO was informed that the regulation received approval from MNR management in December 2000. The draft regulation was then forwarded to the Red Tape Committee and to Cabinet. As of May 2001, the draft regulation was still being considered within government.

MNR's delay in finalizing its instrument classification regulation in the reporting period has prevented the public from seeing or commenting on the ministry's proposals and decisions for specific instruments related to Ontario's natural resources. As a result, to address this unreasonable delay, the Environmental Commissioner tabled a Special Report with the Ontario Legislature in late June 2001, urging MNR to implement its instrument classification regulation before September 1, 2001. MNR has subsequently brought forth this regulation.

*For recent developments, see ministry comments on page 186.*

### Ministry of Northern Development and Mines

It is important for ministries to update their instrument classification regulations when amendments are made to legislation. In 1996, amendments were made to the *Mining Act* that affect how instruments issued by the Ministry of Northern Development and Mines are posted on the Environmental Registry. The amendments were also to have been incorporated into MNDM's part of the instrument classification regulation under the *EBR*, which is administered by the Ministry of the Environment. This was not done because the amended section of the *Mining Act* was not proclaimed into force until June 30, 2000. In August 2000, MNDM posted an information notice on the Registry to amend its instrument classification regulation. At the end of this reporting period, MNDM was waiting for MOE to implement these changes to the instrument classification regulation. The ECO encourages MOE to implement these changes as soon as possible in order to protect the public's right to notice of instruments and, if necessary, request their review or investigation.

## Selected Instruments

As part of our work, the ECO reviews ministry decision-making on selected instruments. In order to illustrate how the public is participating in government decision-making, three of the ECO's reviews are summarized below.

**Permit to Take Water for a Trailer Park**

In January 1999, a proposal for a permit to take water was posted on the Environmental Registry granting permission to John Bayus Ltd. to take 477 litres per minute (LPM) from four different wells for the operation of a year-round trailer park. Instruments issued to allow water taking have become increasingly important, given the concerns about the availability of water after several years of low water levels. There are also serious concerns about water quality after the tragedy of contaminated water in Walkerton.

The proposal for the permit to take water to John Bayus Ltd. resulted in five comments from concerned citizens who live in the vicinity of the trailer park. Most of the local residents voiced concerns about a water shortage in the area, saying that the permit would further deplete local water supplies. One resident noted that the area's water problems were made worse by a lack of monitoring on the part of the Ministry of the Environment.

Partially in response to these comments, MOE decided in January 2001 that the permit to take water should not allow the water taking to exceed 56 LPM from all four wells. The permit also contained strict conditions regarding water level monitoring and reporting.

John Bayus Ltd. filed a notice of appeal in February 2001, appealing the conditions of the permit to take water. As of March 31, 2001, no decision had been rendered by the Environmental Review Tribunal.

**Approval for a Discharge to Air in Hamilton**

Approvals for discharges to air are the most numerous instruments posted on the Environmental Registry. The approval granted to Horseshoe Carbons Inc. in 1999 is an example of an environmentally significant instrument. Horseshoe Carbons Inc. required a certificate of approval (C of A) for air emissions for their Hamilton plant, where it reactivates spent activated carbon from water treatment plants. Air emissions occur as a result of the furnace and drier used to reactivate the charcoal.

There was a great deal of public interest in the proposal for the C of A, which was posted on the Registry in December 1999. The plant is located in an area of Hamilton where there are a number of existing industrial facilities, including the city's main sewage plant and the Hamilton Solid Waste Reduction incinerator. As a result of public interest in the proposal, Horseshoe invited some members of the public to a meeting to explain the proposal. In March 2000, MOE granted a C of A for one year. The C of A contained conditions regarding contaminant testing to ensure control equip-

ment operates at maximum efficiency. However, MOE did not post the decision notice on the Registry stating that the ministry had granted the C of A until October 2000, six months after it was granted. As a consequence, members of the public were effectively denied their right to seek leave to appeal the decision.

In March 2001, carbon dust emissions were higher than anticipated, justifying local residents' fears that the current pollution control technology at the plant was inadequate. As a result, Horseshoe asked for an extension of its one-year C of A to postpone the required testing until further pollution prevent measures were put into place. The outcome of the further testing was not known at the end of this reporting period.

**Mine Closure Plan Amendment Near Schreiber**

Important mining instruments include proposals to amend mine closure plans. In 1993, Inmet Mining Corp applied and received approval for a mine closure plan for its zinc and copper mine near Schreiber. In 1999, a proposal to amend the mine closure plan was posted on the Registry for a 30-day comment period, including a proposal to flood the mine with lime-treated effluent. This is a change to the original plan, which was to treat effluent and then discharge it to the surface water in nearby Winston Lake.

One comment was received from a local environmental group concerned about the effect on groundwater of pumping treated effluent into the mine shaft. The group's concerns were addressed in a letter from MNDM, but their comments did not influence the final decision on the closure plan amendment. However, additional information was provided to the group, which lent greater transparency to the process surrounding the changes to the mine closure plan. The ECO commends MNDM for going beyond the minimal requirements of the *EBR* in responding to the group's concerns.

*For ministry comments, see pages 185-186.*

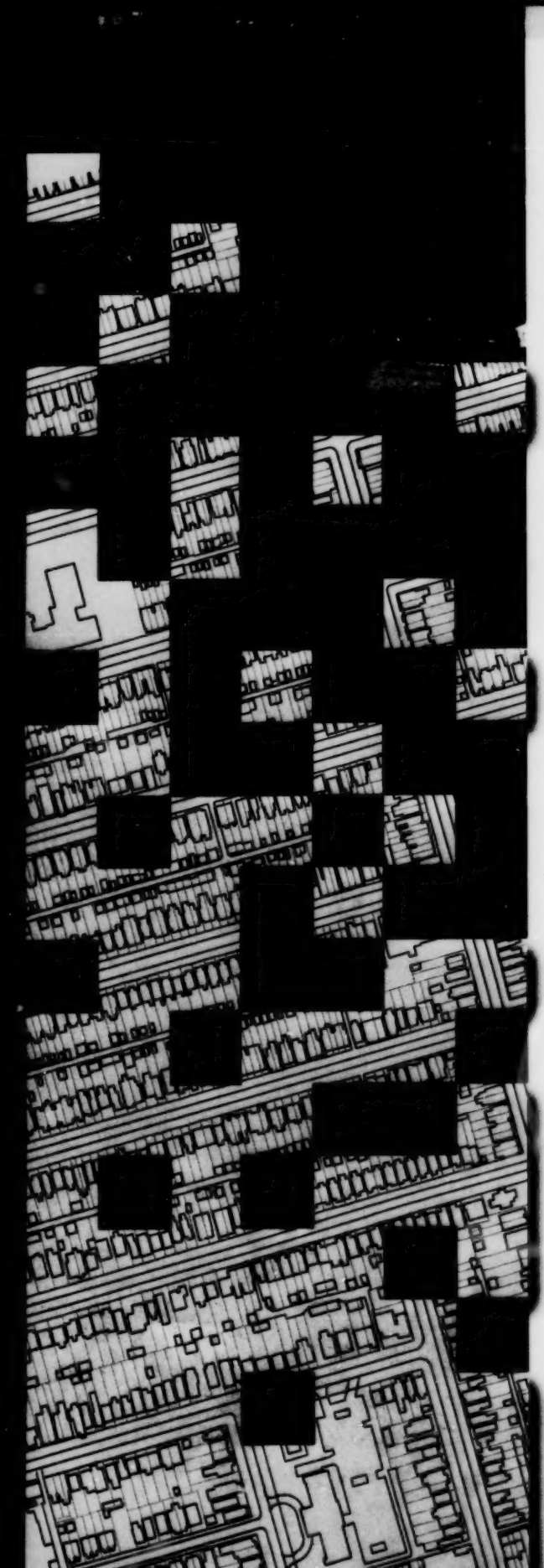
## ECO Educational Initiatives

The *Environmental Bill of Rights* is of vital importance not only to Ontarians, but to the health of our environment. The *EBR* offers a basic foundation on which to improve environmental decision-making. The people of this province not only benefit from the *EBR* – they also are its main strength, because the rights of Ontarians to participate in environmental decision-making are what increases accountability for decisions made by provincial ministries. This is why the Environmental Commissioner of Ontario regards educating Ontarians about their *EBR* rights a crucial prerequisite to better environmental decision-making.

In the past year, an increased number of ECO educational initiatives brought about an increased number of visits to the Environmental Registry Web site by people wishing to participate in environmentally significant proposals. In addition, the ECO continued an aggressive outreach program to inform Ontarians about their rights and about the ECO mandate. ECO education staff spoke to more than 10,000 people during the past year and gave out more than 13,000 publications. ECO staff also promptly responded to over 1,000 public inquiries. Environmental Commissioner Gord Miller continues to encourage and accept invitations to speak personally to audiences throughout Ontario. Since the ECO firmly believes that all environmental decisions must be made on the basis of informed discussion, we have expanded our multifaceted approach to education by actively helping to connect environmentally concerned citizens with government and non-government resources.

One of today's primary means of informing people is via the Internet. To encourage better use of our Web site, the ECO has added some important features. (Please see the section on the Environmental Registry, on pages 24-42.) In this reporting period, more than 28,000 users visited our site – www.eco.on.ca.

To ensure that our educational programs are effective, we regularly gather feedback from audiences. The evaluation of ECO presentations in the past year were very positive, and more and more groups are inviting ECO educational staff to talk to them about their *EBR* rights and how they can use these rights to improve the health of Ontario's environment. The ECO invites you to call us with questions, comments or requests for information, or for a presentation from one of our staff (416-325-3377 or 1-800-701-6454).



# Part 2

## The Environmental Registry

### What is the Environmental Registry?

The Environmental Registry is the main component of the public participation provisions of the *Environmental Bill of Rights*. The Registry is an Internet site where ministries are required to post environmentally significant proposals for policies, Acts, regulations and instruments. The public then has the opportunity to comment on these proposals prior to a decision being made. Provincial ministries must consider these comments when they make their final decision and explain how the comments affected the decision. The Registry also provides a way for the public to learn about appeals of instruments, court actions and other information about ministry decision-making.

Each year the number of user sessions on the Registry grows as Ontarians realize that the Registry is their one-stop shop for information on environmentally significant proposals in their communities. This year the Registry averaged 3,686 user sessions a month.

### What's New?

#### Registry Data More Accessible

In November 2000, the office of the Environmental Commissioner of Ontario began to test a new software application that allows users to download all of the notices on the Registry into a single file. In March 2001, the ECO began to publicize the availability of this new service to the media, the general public and users of

ECO's Web site. This development will make the Environmental Registry much more useful to the people of Ontario. It is now possible to have a complete copy of all Registry notices for any given date after February 22, 2001. The information can be used to create individual analyses and reports organized by location, for example, or by activity.

Because the Registry can now be downloaded in its entirety, users carrying out research on the province's environmental proposals and decisions will be able to sort or filter the Registry database file in a number of different ways:

- Media outlets could set up a database program that would scan Registry information for keywords and topics, and then print out summaries for reporters.
- Businesses can keep on top of all proposals for approvals, policies and regulations that will have an effect on the business sector.
- Municipalities could set up a database program that would create reports about ministry permits, licences, or approvals for activities that could affect the environment within their municipal boundaries – whether, for instance, local businesses are asking a ministry for permission to release substances into the air or into a local river.
- Changes to Registry notices can be monitored and compared.
- Environmental organizations would be able to develop complimentary systems to notify their members about significant pending proposals.

The process of notifying other members of an organization can also be automated, eliminating time-consuming manual scans and searches. In the past, searching and filtering could be done on the Registry information, but each search had to be done independently each day. Now the entire Environmental Registry can be downloaded in two database formats – a zipped text file or a zipped Microsoft Access file. The new system allows third parties to develop "push technology" – automatic notifications to their client groups on a daily, weekly or monthly basis.

To access the new download site, people can visit the Environmental Commissioner's site at www.eco.on.ca, click on Environmental Registry and then on the download link, and the download process will begin.

## The ECO's Web site

In addition to the new downloadable Registry feature, the ECO's Web site has been upgraded with a new look and many other new features that enhance the public's ability to access environmentally significant information. For example, there is now a section entitled "Current Registry Postings of Interest," which contains a short description of some Acts, regulations, policies and instruments currently posted on the Registry that we think you may find interesting. There is a direct link from the notice description to the Registry if you want to examine the notice in more detail, or perhaps submit your own comments.

Similarly, there is also a new section entitled "Current Environmental Assessments and Terms of Reference," where the ECO highlights those Terms of Reference which may be of interest, with links directly to the Environmental Assessment home page for further detail.

The ECO has also developed a new email notification service for our new publications. If you wish to receive an email telling you when the ECO releases a new report or places a media release on our Web site, please register with the service by visiting our Web site.

## The Environmental Registry: Quality and Availability of Information

The Environmental Registry is only as good as the information it contains. The *EBR* sets out basic information requirements for notices that ministries post on the Registry. The ministries also have discretion on whether to include other information. Previous annual reports of the Environmental Commissioner have recommended that in posting information on the Registry, ministries should:

- use plain language
- provide clear information about the purpose of the proposed decision and the context in which it is being considered
- provide a contact name, telephone and fax number
- clearly state the decision and how it differs from the proposal, if at all
- explain how all comments received were taken into account
- provide hypertext links to supporting information whenever possible

The ECO evaluates whether ministries have complied with their obligations under the *EBR* and exercised their discretion appropriately in posting information on the Registry. This ensures that ministries are held accountable for the quality of the information provided in Registry notices.

### Comment Periods

The *EBR* requires that ministries provide residents of Ontario with at least 30 days to submit comments on proposals for environmentally significant decisions. Ministries have the discretion to provide longer comment periods, depending on the complexity and level of public interest in the proposal.

All proposal notices placed on the Registry in 2000/2001 were posted for at least 30 days. A review of a sample of instrument proposal notices showed that all of them met the minimum comment period as required by the *EBR*.

MOE posted 30 out of 52 proposals for new policies, Acts or regulations for 45 days or more. The Ministry of Natural Resources posted 12 out of 29 proposals for new policies, Acts or regulations for 45 days or more. In some instances, the ministries re-posted notices several times, thereby extending

comment periods beyond 60 days. In these circumstances, the prescribed ministries did not always indicate that comments received under the previous notice(s) would be considered under the re-posted notice.

In last year's annual report, the ECO reported that in a few instances ministries posted complex proposals for only 30 days. In 2000/2001 the ECO reviewed all Registry notices for proposed policies, Acts and regulations to determine whether the ministries had provided sufficient comment periods according to the complexity of their proposals. Our review concluded that approximately one-quarter of the proposal notices for polices, Acts and regulations posted by all of the prescribed ministries were complex enough to warrant a longer comment period than the minimum 30 days.

## Adequate Time to Comment on New Acts

Particularly noteworthy examples of proposals with insufficient public comment periods were those proposals related to Bill 119, the *Red Tape Reduction Act, 2000.*

The provincial government stated that it enacted the *Red Tape Reduction Act, 2000*, to reduce "red tape," promote good government through better management of ministries and agencies, and improve customer service by amending or repealing certain Acts and by enacting two new Acts, including the *Environmental Review Tribunal Act.* MOE posted its proposal notices on the Registry in October 2000, and provided a 30-day comment period.

The handling of its proposal for the *Red Tape Reduction Act* by the Ministry of Natural Resources was of particular concern to the ECO. In May 2000, MNR placed its proposal for the proposed Act on the Registry for a comment period of 30 days, but did not provide access to the text of the proposed Act until 11 days prior to the end of the comment period. An affected stakeholder group contacted the ECO and raised concerns about this. In response to ECO inquiries, MNR staff advised that the legislative timetable of the provincial government for the 2000 Spring Session required that the comment period for this proposal end in mid-June 2000. Therefore, there would be no extension of the comment period. In the end, the proposed Act was not introduced for first reading and did not pass third reading before the end of the 2001 Spring Session of the Legislature. There was indeed time, therefore, to extend the comment period for this proposed Act. The net result of these circumstances was to frustrate stakeholder groups unnecessarily and undermine the objectives of the *EBR*.

The ECO believes that the complexity of the *Red Tape Reduction Act*, and its effect on more than 70 other Acts, warranted comment periods longer than 30 days. The time needed to read through the changes the Act proposed, let alone to develop informed public comments on individual ministry proposals, necessitated extended comment periods beyond the minimum consultation provided under the *EBR*. For instance, the public did not receive an adequate opportunity to review and comment on the draft text of the proposed Act. In the ECO's 1996 Guidance Document, "Implementing the *Environmental Bill of Rights*: Environmental Registry Notice and Comment Procedures," ministries were urged to post draft Acts on the Registry as soon as they have been approved for consultation to ensure maximum opportunity for the public to comment. Where there is early public con-

sultation on policy options on the Registry, the resulting draft legislation should also be placed on the Registry for comment.(For a detailed decision review of MOE's proposals relating to the Red Tape Reduction Act, see the Supplement to this report, pages 93-95.)

In September 2000, the Environmental Commissioner wrote to all deputy ministers of the prescribed ministries to clarify the ECO's views on how the ministries should post proposals on the Environmental Registry for new environmentally significant Acts. In particular, the Environmental Commissioner urged the ministries to assist the ECO in making the *EBR* a more useful public policy tool by developing legislative proposals in a systematic way that allows for informed public comment on the full text of draft Acts for at least the minimum 30-day comment period.

The Environmental Commissioner also recognized in his correspondence to the ministries that for various reasons – including the Ontario government's approach to legislative priorities – ministries may find it difficult to provide regular 30-day or extended Registry comment periods on first reading versions of proposed Acts. In those cases where ministry staff are uncertain as to whether the proposed legislation will pass third reading before the end of the proposed Registry comment period, the ECO suggests that the ministries include an explanation within the Registry notice that states that the comment period may be shortened if the Legislature decides to pass the bill into law prior to the end of the proposed comment period.

## Description of Proposals

Ministries are required to provide a brief description of proposals posted on the Registry. The description should clearly explain the nature of the proposed action, the geographical location(s), and the potential impacts on the environment.

### Policies, Acts and Regulations

Again in 2000/2001, as in 1999/2000, the quality of descriptions varied widely during the reporting year. In the past the ECO has stressed the need for ministries to use plain language in Registry notices and avoid the use of technical terms and jargon. The ECO's review of Registry notices over the 2000/2001 reporting year indicated that efforts have been made, but the ECO urges the prescribed ministries to continue to make a concerted effort in this regard.

During this reporting period, descriptions of proposals for policies, Acts and regulations generally met the basic requirements of the *EBR*. The proposal notices provided brief and understandable explanations of the actions the ministries were proposing. However, ministries could still improve the contextual background information for their proposals, since readers may not be familiar with environmental law and policy in Ontario.

One example of a proposal notice which provided a clear description in keeping with the spirit of the *EBR* is MNR's Significant Wildlife Habitat Technical Guide (SWHTG), which explained the broader context of the guide as a technical support document to the Provincial Policy Statement. The SWHTG proposal description also highlighted the key points of the document in plain language and did not include a lot of scientific and technical jargon.

## Instruments

The Ministries of the Environment, Municipal Affairs and Housing, and Northern Development and Mines, along with the Technical Standards and Safety Authority (TSSA), all administer and issue instruments that must be posted on the Environmental Registry as proposals. ECO staff evaluated the quality of information in a sample of nearly 120 instruments. These instruments include the licences, orders, permits and certificates of approval issued to companies and individuals granting them permission to undertake activities that may affect the environment.

### Acceptable Description for a Proposed Instrument

**Instrument Proposal:**
**EPA s. 17 – Order for remedial work;**
**EPA s. 18 – Order for preventative measures**
**Registry Number: IA00E1720**

The following description was excerpted from the cited Registry proposal notice. The text in the description defined the technical term, and provided information in plain language about the reason for the proposed Order and the steps required by the company to clean up the environment.

**Description:** Heather & Little conducted roofing operations at 20 Wagstaff Drive since 1956. Coal tar pitch was used by Heather & Little from the 1950's to the late 1970's as a roofing sealant. A main component of coal tar pitch is a group of chemicals called PAH or polycyclic aromatic hydrocarbons. MOE conducted soil sampling from 1995 to 1997, which indicated that 20 Wagstaff Road and residential properties in the area of Wagstaff Drive were contaminated with moderate to high levels of PAH. Attempts by Heather & Little to bio-remediate all the contaminated soils were proven unsuccessful. The MOE is issuing a Notice of Intent to Order. The work required under the Order is to identify all the residential sites that are contaminated with PAH as a result of the roofing activities at 20 Wagstaff Drive; submit a plan of action to cleanup the sites; and upon approval of the action plan, by the Director, conduct the necessary work to cleanup the contaminated soils.

### Poor Description for a Proposed Instrument

**Instrument Proposal:**
**EPA s. 9 – Approval for discharge into the natural environment other than water (air)**
**Registry Number: IA00E1647**

The following is excerpted from the cited Registry proposal notice. The description used technical terms without adequate explanation and failed to provide details about the nature of the industrial operation, the effects of the proposed change, or the previous certificate of approval's requirements for emissions and production rates as mentioned in the notice.

**Description:** This Certificate of Approval Amendment application is to remove the current mercaptan sulphur limits of hydraulic capacity (flow rate) and mercaptan sulphur extraction capacity (concentration) and replace them with a total mercaptan sulphur loading limit for the Merox Treating unit at the Alkylation (ALIS) Unit. The production rates and maximum possible emissions have not changed from the previous certificate of approval.

## Instruments

The Ministries of the Environment, Municipal Affairs and Housing, and Northern Development and Mines, along with the Technical Standards and Safety Authority (TSSA), all administer and issue instruments that must be posted on the Environmental Registry as proposals. ECO staff evaluated the quality of information in a sample of nearly 120 instruments. These instruments include the licences, orders, permits and certificates of approval issued to companies and individuals granting them permission to undertake activities that may affect the environment.

### Acceptable Description for a Proposed Instrument

**Instrument Proposal:**
**EPA s. 17 – Order for remedial work;**
**EPA s. 18 – Order for preventative measures**
**Registry Number: IA00E1720**

The following description was excerpted from the cited Registry proposal notice. The text in the description defined the technical term, and provided information in plain language about the reason for the proposed Order and the steps required by the company to clean up the environment.

**Description:** Heather & Little conducted roofing operations at 20 Wagstaff Drive since 1956. Coal tar pitch was used by Heather & Little from the 1950's to the late 1970's as a roofing sealant. A main component of coal tar pitch is a group of chemicals called PAH or polycyclic aromatic hydrocarbons. MOE conducted soil sampling from 1995 to 1997, which indicated that 20 Wagstaff Road and residential properties in the area of Wagstaff Drive were contaminated with moderate to high levels of PAH. Attempts by Heather & Little to bio-remediate all the contaminated soils were proven unsuccessful. The MOE is issuing a Notice of Intent to Order. The work required under the Order is to identify all the residential sites that are contaminated with PAH as a result of the roofing activities at 20 Wagstaff Drive; submit a plan of action to cleanup the sites; and upon approval of the action plan, by the Director, conduct the necessary work to cleanup the contaminated soils.

### Poor Description for a Proposed Instrument

**Instrument Proposal:**
**EPA s. 9 – Approval for discharge into the natural environment other than water (air)**
**Registry Number: IA00E1647**

The following is excerpted from the cited Registry proposal notice. The description used technical terms without adequate explanation and failed to provide details about the nature of the industrial operation, the effects of the proposed change, or the previous certificate of approval's requirements for emissions and production rates as mentioned in the notice.

**Description:** This Certificate of Approval Amendment application is to remove the current mercaptan sulphur limits of hydraulic capacity (flow rate) and mercaptan sulphur extraction capacity (concentration) and replace them with a total mercaptan sulphur loading limit for the Merox Treating unit at the Alkylation (ALIS) Unit. The production rates and maximum possible emissions have not changed from the previous certificate of approval.

Last year, the ECO reported its concern that the instrument notices sampled contained sketchy descriptions of the proposed instruments. In the 2000/2001 instrument proposal sample, the quality of MOE's and MNDM's descriptions varied between providing enough detail and being too brief. Two contrasting examples of MOE notices are provided above. About two-thirds of the TSSA notices sampled provided enough basic information to allow the reader to understand the proposal. Most of MMAH's notices sampled were brief and required more detail.

The MNDM notices generally demonstrated good use of plain language. While the majority of TSSA and MMAH notices contained plain language, some notices still included unclear or undefined terms. MOE notices continue to rely on technical terms. Use of unclear terms was especially prevalent in the air-related, sewage works and interim pesticide instrument proposals that were reviewed.

Ministries need to include clear language and an adequate description of the activity so that the public can understand the proposal and make a decision on whether or not they wish to provide comments.

## Access to Supporting Information

### Policies, Acts and Regulations

Ministries are required to provide information in Registry notices about when and where residents can review supporting documentation about proposals. The majority of proposals on the Registry in 2000/2001 provided access to supporting information either by listing a contact person, phone number and address, or by providing an electronic link to supporting documentation. There were, however, approximately 20 examples where ministry notices failed to provide a contact name and/or supporting information. For example, MOE's proposal notice for the Housekeeping Changes to Regulation 73/94 under the *EBR* (RA00E0027) did not provide a contact name, only a position, and indicated only the copies *may* be available for viewing at one government office.

The ECO has expressed concern in previous years that certain notice templates contain ambiguous terms and phrases related to the availability of supporting documents at viewing locations. The template uses the term "may" in reference to the availability of copies of proposals or decisions and supporting information. In late February 2001, MOE reported in response to the ECO's 1999/2000 concern that the template is currently being redeveloped. MOE also committed to undertake "significant improvements" to the Registry in general, and to conduct public and stakeholder consultation on Registry-user needs and expectations. This consultation, MOE reported, will be facilitated through the Registry itself. The ECO is pleased to see that MOE has finally undertaken to revise the template, but is disappointed that it has taken so long to begin the process.

The ECO has also received complaints from residents who are dismayed by the fact that MOE has begun to charge a fee to members of the public who requested photocopies of documents such as certificates of approval. The ECO encourages all prescribed ministries to provide as much information as possible to the public in order to facilitate informed public comments.

Last year the ECO urged ministries which use "hypertext" links to the Internet to make more effective use of this tool. This can be achieved by explaining in the text of the Registry notice what infor-

mation the link leads to and how the information is relevant. Use of Internet links can save Ontario residents time in accessing more detailed information, and can therefore facilitate public participation. Ministries' Registry notices are increasingly providing these links to supporting documentation. While some improvements in hypertext functionality have been evident over the reporting year, problems still remain. For example, several MNR proposal and decision notices still provide hypertext links which lead to a government home page or to a list of government statutes, and not directly to the document of interest and do not explain to the user how to navigate the site to access the necessary document or information.

### Instruments

In the instrument proposal notices reviewed, MMAH, TSSA and MNDM consistently provided the name of a person the public could contact for more information. MMAH and TSSA also provided "1-800" numbers to assist the public. While they were not actually linked to its Web site, the TSSA notices did include the Web site address. MMAH, TSSA and MNDM also performed a reasonable job in providing other contact information such as address, phone and fax numbers. In contrast, nearly three-quarters of the sampled MOE instrument notices failed to provide the name of a contact person.

## Environmental Impacts

### Policies, Acts and Regulations

In the ECO's 1999/2000 annual report, concern was expressed about the number of Registry notices that described the economic and social impacts of a proposal without properly explaining the environmental impacts. In preparing our 2000/2001 annual report, ECO staff reviewed 81 notices for proposed policies, Acts and regulations posted by MOE and MNR to determine whether these ministries were improving their descriptions to include explanations of potential environmental impacts. In 2000/2001, 33 out of 52 MOE Registry proposals and 13 out of 29 MNR proposals did not explain the environmental impacts of the proposed activities. However, MNR did provide Regulatory Impact Statements for proposed regulations.

The ECO commends the Ministry of Energy, Science and Technology for its effective use of the Registry in a proposal for setting minimum energy efficiency levels for two products – gas-fired pool heaters and gas-fired clothes dryers – and updating the referenced national standard for seven products. MEST clearly states the environmental impacts of the proposal in the following manner:

> Fossil fuel generation of electricity results in emission oxides of carbon, nitrogen and sulphur. These emissions are the principal cause of acid rain, urban smog and potential climate change. The Regulation will continue to reduce the environmental impact of energy use and will encourage energy conservation by increasing the efficiency of products sold or leased in Ontario, thus reducing the consumption of fossil fuels and the release of pollutants to the environment.

### Instruments

Instrument proposal notices varied in terms of how well potential environmental impacts of the activity were summarized. The three ministries and one agency (TSSA) that post instrument notices on the Registry could improve their performance in this area. The *EBR* does not legally require ministries to include this information. However, it is in keeping with the intent of the *EBR* for ministries to provide this summary so that the public can understand the potential environmental impacts of proposed activities.

## Description of the Decision

Once a ministry has made a decision on a proposal posted on the Registry, the *EBR* requires the minister to provide notice of the decision on the Registry as soon as possible.

The description of the decision in a Registry notice lets residents of Ontario know the outcome of the public consultation process. As was the case last year, many ministry descriptions continue to be quite brief. Many decisions simply stated that the decision was "to proceed with the proposal." In the interest of clarity and transparency, ministries should include the date on which the decision was made, the date on which the decision becomes effective, the regulation number if applicable, and an explanation of whether there have been any changes made to the proposal.

## Explaining How Public Comments were Addressed

The *EBR* requires the prescribed ministries to explain how public comments were taken into account in making a decision. Ministries should take the time and effort to summarize the comments, state whether the ministry made any changes as a result of each comment or group of related comments, and explain why or why not. Without a description of the effects of comments in the decision notice, commenters will be unaware of whether their comments were considered. In situations where there is a large number of comments, ministries should make an effort to summarize appropriately the comments and their effect on the decision.

The ECO commends MNR on its efforts to include a detailed summary of the comments received and their effect on the decision in relation to the final approval of several provincial park management plans, in particular the Presqu'ile Provincial Park Management Plan. This proposal generated over 2,500 comments. (See page 113 of this report for more details on this issue.) Mention should also be made of MNR's decision notice regarding the proposal for a Significant Wildlife Habitat Technical Guide, in which MNR not only detailed the comments that affected the decision, but also those that did not have a direct bearing.

There are, however, a few cases where the ministries acknowledged that comments were received and yet failed to explain their effect. For example, MOE's Drinking Water Protection Regulation (O.Reg. 459/00) proposal generated 28 comments, but these comments were not summarized in the decision notice, nor was a description given for how they were considered by MOE. Since the origi-

nal proposal for the regulation was very sketchy, an accurate description of the impact of comments would have promoted transparency and accountability in relation to one of the most important decisions made by MOE in 2000. (For further discussion of this regulation, see pages 110-112 of this report.)

## Summary

The Environmental Registry provides the first point of contact for Ontario residents who want to participate in environmental decision-making. The Registry should be as user-friendly as possible. The recommendations contained in this and previous annual reports are intended to improve the quality of information on the Registry and to ensure that the public is able to participate fully in Ontario's environmental decision-making process.

It is important for all Registry notices to contain adequate detail. Without it, the public may not understand the environmental significance of a proposal, how their comments were taken into account, or the nature of the decision. The public requires this information to exercise their rights under the *EBR* and to participate effectively in the decision-making process. Ministries still have much room for improvement in their use of the Environmental Registry.

*For ministry comments, see pages 186-187.*

# Unposted Decisions

Under the *Environmental Bill of Rights*, prescribed ministries are required to post notices of environmentally significant proposals on the Environmental Registry for public comment. When it comes to the attention of the Environmental Commissioner that ministries have not posted such proposals on the Registry, we review that decision to determine whether the public's participation rights under the *EBR* have been respected.

The ECO's inquiries on "unposted decisions" can lead to one of several outcomes. In some cases, the ministry responsible provides the ECO with a legitimate reason for not posting the decision on the Registry. For example, the decision may not be environmentally significant, it may have been made by a related non-prescribed agency instead of the ministry itself, or it may fall within one of the exceptions allowed in the *EBR*. In other cases, the ministry subsequently posts a notice on the Registry under Sections 15, 16 or 22 of the *EBR*. Finally, in certain cases, the decision may remain unposted, with the ECO disagreeing with the ministry's position that the particular decision does not meet the posting requirements of the legislation. Instances of unposted decisions from 2000/2001 include MOE's elimination of its acid rain monitoring network, MTO's new approach to provincial transportation planning, and MOE's moratorium on the sale of coal-fired generating stations. The Supplement to this report provides more information on the ECO's tracking of unposted decisions and our findings on ministry responses to our inquiries.

## Ongoing Monitoring for Potential Unposted Decisions

Monitoring ministry activities helps the ECO to stay on top of important environmental developments and, when necessary, to remind the ministries of their obligation to post environmentally significant proposals on the Registry for public comment. The following two examples show the outcomes of the ECO's tracking efforts.

### MNR: Ontario Water Response 2000

In response to the extended period of low water levels and dry soils experienced in southwestern and eastern Ontario in the spring and summer of 1999, the government prepared a draft drought response plan entitled Ontario Water Response 2000 (OWR 2000). The Ontario Water Directors Committee (the Ministries of Natural Resources; Environment; Agriculture, Food and Rural Affairs; Municipal Affairs and Housing; and Economic Development and Trade), along with the Association of Municipalities of Ontario and Conservation Ontario, contributed to the document. The approach presented in OWR 2000 is based on existing legislation and regulations, and existing relationships between the province and local government bodies. The draft OWR 2000 document describes how streamflow and rainfall will be monitored to assess and classify drought into varying levels of severity, and how response actions will be matched to those levels.

Despite an announcement to the Legislature by the Minister of Natural Resources in May 2000 about the release of OWR 2000, the document was not posted on the Environmental Registry nor on the ministry's Internet site. In the summer of 2000, the media also reported that OWR 2000 was being implemented.

The ECO wrote to MNR expressing concern with the lack of Registry notice for OWR 2000. The ministry subsequently posted the draft document as a proposal on the Registry. The ECO is pleased that MNR posted a proposal notice to gather public input into OWR 2000. However, the ministry should have sought public input while developing the drought response measures, not after their reported implementation.

In May 2001, the ministry posted a decision notice on the Registry for OWR 2000. (For more information on environmental issues related to the topic of groundwater management, see pages 84-88 of this report.)

### MOE: Need for Historical Data on the Air Quality Ontario Web Site

In May 2000, under its Air Quality Ontario initiative, MOE launched a new Web site. As described in more detail on pages 65-71 of this report, the site was missing important historical air quality monitoring data previously made available by the ministry.

The ECO expressed its concern that reduced public access to historical air monitoring data could constitute a ministry policy decision under the *EBR*. Such an important program change should be posted for public comment on the Environmental Registry.

Ministry staff responded that, due to computer system capacity issues experienced during the first phase of Web site development, MOE traded the provision of historical data for other items such as

Smog Watch forecasts and more frequent Air Quality Index (AQI) readings. MOE told the ECO that it recognized the importance of the historical air quality data and that it planned to provide daily AQI readings for the entire 2001 smog season on the Air Quality Ontario Web site. The ECO will monitor the ministry's progress in meeting this commitment.

## Environmentally Significant Unposted Decisions

### MOE: Shutting Down the Acid Rain Monitoring Network

Acid rain continues to cause negative environmental impacts for Ontario forests and lakes. MOE's Dorset Research Centre has found that about half the lakes being studied in the Muskoka-Haliburton area show no progress at all, with the other half showing only a slight improvement from acid rain damage. In January 2000, the Minister of the Environment told a gathering of scientists that the acid rain issue points to another crucial function of long-term environmental monitoring – that it helps people to assess the success of remedial actions. The minister also stated that acid rain monitoring has revealed that any victory celebrations related to Ontario's acid rain problem would be premature.

Yet, on April 1, 2000, MOE decided to shut down its network of acid deposition monitoring stations as a cost-saving measure. MOE failed to post a proposal notice on this important decision before ministry management took action.

In the mid-1980s, MOE had a network of approximately 40 acid rain monitoring sites. Program cuts reduced this number over time, and by the late 1990s, only 16 sites were operating within the province to monitor air and precipitation. The remaining sites apparently cost about $100,000 per year to operate.

In response to ECO inquiries, the ministry stated that seven stations run by Environment Canada would provide adequate data to feed into the ministry's computer model to produce acid deposition maps. The ministry also assured the ECO that it would continue to monitor smog precursors at over 70 sites across Ontario, and would also continue to monitor trends in water quality in acid-sensitive watersheds, focusing on lakes near Dorset, Sudbury and Killarney.

It is too early to tell whether MOE's reliance on computer modeling will provide an adequate picture of acid rain loadings in the province. But given the continuing effects of acid rain on the province's ecosystems, the ministry's cancellation of this important monitoring work without public input is cause for concern.

### MTO: New Approach to Provincial Transportation Planning

The ECO learned that the Ministry of Transportation was failing to provide for public input, through the Environmental Registry, into long-range transportation planning exercises called Needs Assessment Studies. During 2000/2001, these studies are under way or proposed for communities such as Niagara, Toronto, Windsor and Ottawa. The public deserves a chance to comment on transportation alternatives early on because the decision on whether or not to build a highway, or to proceed with other options, will have long-lasting implications for provincial and local ecosystems and

human health related to transportation air emissions. In response to ECO inquiries, the Ministry of Transportation indicated that it will notify the public through information notices on the Environmental Registry when Needs Assessment Studies are both initiated and completed. As explained in more detail on page 61 and Section 1 of the Supplement, this partial step falls short of the ECO's request that formal policy proposals be posted on the Registry to foster public involvement, in keeping with the intent of the *EBR*.

### MOE: Moratorium on the Sale of Coal-Fired Generating Stations

In May 2000, MOE announced that it was placing a moratorium on the sale of all coal-fired generating stations "pending a review of options for environmental protection." No proposal was placed on the Environmental Registry for comment.

In response to an ECO letter urging the ministry to post its moratorium as a proposal on the Registry, MOE responded that it did not provide an opportunity for public comment because ". . . the moratorium just ensures the status quo. . .it does show a commitment to the environment. . .MOE was aware of public concerns about the possible sale of coal-fired plants. MOE decided that the moratorium was prudent because MOE did not want to carry any risk that a change of ownership might have an unforseen influence on environmental decisions." MOE also advised that if the proposed environmental protection measures include conditions of sale on any, or all, coal-fired power plants, the ministry would post the conditions on the Registry.

Even proposals with potentially positive environmental effects should be posted on the Registry. Given the impacts of coal-fired electricity generation, and the environmental significance of modifying their operation, MOE should have provided for public input into the ministry's moratorium and review of environmental options.

The ECO is pleased that MOE is now providing opportunities for public comment on the specific outcomes of its moratorium and environmental review. For example, *EBR* Registry notice RA01E0008, dated March 26, 2001, sought public comment on a proposed regulation to require the Lakeview Thermal Generating Station to cease burning coal by April 2005. However, that Registry notice does not replace the benefits of public input at the earlier policy development stage.

## Posting Environmentally Significant Proposals Early and Often

The ECO's 1996 Guidance Document, entitled *Implementing the Environmental Bill of Rights: Environmental Registry Notice and Comment Procedures*, recommends that prescribed ministries post a proposal notice on the Registry for public comment as soon as an initial draft of a policy, Act or regulation has been approved for consultation at the appropriate level in the government's approval system, and at the same time that any other public consultation begins.

In some cases, ministries follow this long-standing ECO advice to "post early, post often." Noteworthy examples include the Ministry of Natural Resources' Provincial Park Management Plans and the Ministry of the Environment's Air Standards Plan. However, as illustrated by the unposted decisions described above, ministries still need to improve their implementation of this ECO guid-

ance. When in doubt about whether or not a Registry notice is required, ministries should act in keeping with the intent of the *EBR* and provide for public input.

*For ministry comments, see page 187-188.*

## Information Notices

In cases where provincial ministries are not required to post a proposal notice on the Environmental Registry for public comment, they can still provide a public service by posting an "information notice" on the Registry under Section 6 of the *EBR*. These notices keep Ontario residents informed of important environmental developments.

During the 2000/2001 reporting year, five ministries posted 46 information notices related to policies, regulations and instruments. This is similar in number to last year's total of 50. This year's notices were distributed as follows:

| Ministry | Number of Information Notices (Except for Forest Management Plans) April 1, 2000-March 31, 2001 |
|---|---|
| MBS | 4 |
| MMAH | 17 |
| MNDM | 2 |
| MNR | 13 |
| MOE | 10 |
| **TOTAL** | **46** |

Please refer to the Supplement to this report for a more detailed description of these notices.

The Ministry of Natural Resources posted more than 30 additional information notices for Forest Management Plans during this reporting period. Last year, the ministry posted more than 60. These plans establish long-term objectives for sustainability, diversity, timber harvest levels and forest cover in particular forests. The ECO commends the ministry for posting these plans on the Registry, since they allow the public to become informed of forestry planning.

## The Use of Information Notices

Ministries should use an information notice only when they are not required to post a regular notice for public comment (under Sections 15, 16 or 22 of the *EBR*). Significant differences exist between regular proposal notices posted on the Registry and information notices. When regular proposal notices are posted on the Registry, a ministry is required to consider public comment and post a decision notice explaining the effect of comments on the ministry's decision. The ECO then reviews the extent to which the minister considered those comments when he or she made the final decision,

and the ministry must also consider its Statement of Environmental Values in the decision-making. This process is far superior to posting an information notice, and provides greater public accountability and transparency.

As in past years, some ministries sought public comment through information notices. This practice causes confusion for the public, since, as noted above, there is no legal requirement for the ministries to consider public comments or to post a final decision with regard to information notices. Therefore, if a prescribed ministry decides that it is appropriate to seek public comment on a policy, Act or regulation proposal through the Registry, the correct procedure is to post a regular notice, not an information notice. Even if a regulation is not prescribed under the *EBR*, no legal reason exists to prevent posting a regular notice.

This is not true of those instruments that are not prescribed under the *EBR*, and which thus are not required to be posted on the Registry. Seeking comment on a non-prescribed instrument through a regular notice could cause confusion and legal complications related to the public's *EBR* rights to seek leave to appeal certain prescribed instruments.

Ministries that post information notices can inform the public in the text of the notice about the availability of any other "non-*EBR*" consultation opportunities. It is also important that ministries explain in the text of the information notice why a regular notice is not needed. Many of the information notices posted in the past year did not provide a clear or complete explanation. For example, MOE's information notices for instruments related to the *Environmental Assessment Act (EAA)* did not adequately explain why and how the *EAA* exemption applied. Other information notices merely referred to legal provisions without providing a plain language explanation and still others simply stated that a regular notice was not required. These kinds of explanations are inadequate and do not promote understanding or transparency.

## Inappropriate Use of Information Notices

The ECO is concerned about several inappropriate uses of information notices during the past reporting year.

### Objective-Based Building Code

The Ministry of Municipal Affairs and Housing carried out consultation on an Objective-Based Building Code (OBBC) for Ontario. The OBBC consultation paper refers to important environmental considerations such as resource conservation and environmental integrity, and presents a new approach to administering the Building Code within Ontario. MMAH expects the new approach to form the basis of the next version of Ontario's Code. Although the ECO urged MMAH to post a regular notice of the proposed policy, the ministry posted an information notice which, as described above, does not provide the same accountability and transparency benefits. Also, the text of the notice did not provide a clear or adequate rationale for posting an information notice. MMAH did post a regular policy proposal in 1996 for *Back to Basics: A Consultation Paper on the Focus of the Ontario Building Code*, which had goals similar to the current OBBC exercise.

### Areas of Natural and Scientific Interest

The Ministry of Natural Resources posted an information notice on its Confirmation Procedure for Areas of Natural and Scientific Interest (ANSIs). In response to ECO inquiries, MNR stated that it did not post a regular notice (under Section 15 of the *EBR*), because the Confirmation Procedure is essentially administrative in nature and does not alter the underlying ANSI policy and program. MNR acknowledges that the Confirmation Procedure was developed to address the concern that the steps and procedures used by the ministry to confirm ANSIs have changed since 1983 and were not always applied consistently across the province. But the ministry asserts that:

- standardization of the procedure, including the provision of public notice for ANSI evaluations and opportunities for public review of the science underlying the ANSI designation, does not reflect a policy shift
- the underlying earth and life science frameworks and their application to identify candidate ANSIs remain unaffected by improvements to the confirmation process

However, the ECO's research shows that changes to MNR's steps and procedures reflect a shift in policy direction, and that these changes are environmentally significant.

For example, all existing ANSIs not protected in a provincial park or conservation reserve through the Lands for Life/Ontario's Living Legacy Land Use Plan will no longer be recognized as ANSIs on Crown land within the planning area. This is a change to MNR's existing ANSI policy, which said that ANSIs were intended to complement protected areas. ANSIs formerly required special consideration in forestry activities, for instance. The elimination of ANSI status on these lands may result in damage or destruction of the features of the ANSI that were formerly protected.

In another example, regional and local ANSIs are no longer part of MNR's ANSI program. This is environmentally significant because some other policies, such as the 1991 Oak Ridges Moraine Guidelines, require consideration of regionally significant ANSIs such as the Jefferson Forest. MNR describes this forest as "the largest natural area in Richmond Hill and one of the 11 largest forests on the Oak Ridges Moraine." The Toronto Region Conservation Authority, the Regional Municipality of York, and the Town of Richmond Hill acknowledged the environmental significance of the Jefferson Forest by purchasing it for protection.

The public should have had the opportunity to comment on these policy shifts through a regular notice posted on the Environmental Registry.

## Appropriate Use of Information Notices

Several ministries did use information notices appropriately. For example, in response to an ECO inquiry, the Ministry of the Environment used an information notice to publicize the availability of its Adverse Water Quality Incident Reports, concurrent with placement of this information on the ministry's Web site. MOE also posted an information notice to link together its air standards development activities, which were the subject of several regular Registry notices. Given the number of

regular notices and their environmental significance, this information notice provided an important public service.

The Ministry of Northern Development and Mines posted an information notice regarding the start of rehabilitation activities at the abandoned and highly contaminated Kam Kotia mine site. (For an update on the Kam Kotia rehabilitation project, refer to pages 89-90 of this report.)

## Quality of Information Notices

In the 1999/2000 annual report, the ECO expressed concern that the Environmental Registry "template" incorrectly classifies information notices as "exceptions." The ECO encouraged MOE, which is responsible for the template, to revise it to reduce confusion. MOE has reported that a stand-alone information notice is being developed, which will eliminate confusion between information notices and exception notices. In the interim, MOE says it has notified ministries of the need to state clearly the status of information notices.

Last year, the ECO encouraged ministries to update information notices if they were related to an ongoing project and to ensure that any updates indicate clearly which parts of the notice reflect new information. Some updates were provided this year. These revised notices should preserve the content of the original notice as much as possible and should clearly indicate which material is new.

The ECO is concerned about the clarity and completeness of the content of information notices. As in past years, the ECO encourages ministries to ensure that all information notices are written in plain language and include the name, address, phone number and fax number of a ministry contact person.

*For ministry comments, see page 188-189.*

### Recommendation 1

**The ECO recommends that:**

ministries use information notices only when they are not required to post regular proposal notices.

## Exception Notices

In certain situations, the *Environmental Bill of Rights* relieves provincial ministries of their obligation to post environmentally significant proposals on the Registry for public comment.

regular notices and their environmental significance, this information notice provided an important public service.

The Ministry of Northern Development and Mines posted an information notice regarding the start of rehabilitation activities at the abandoned and highly contaminated Kam Kotia mine site. (For an update on the Kam Kotia rehabilitation project, refer to pages 89-90 of this report.)

## Quality of Information Notices

In the 1999/2000 annual report, the ECO expressed concern that the Environmental Registry "template" incorrectly classifies information notices as "exceptions." The ECO encouraged MOE, which is responsible for the template, to revise it to reduce confusion. MOE has reported that a stand-alone information notice is being developed, which will eliminate confusion between information notices and exception notices. In the interim, MOE says it has notified ministries of the need to state clearly the status of information notices.

Last year, the ECO encouraged ministries to update information notices if they were related to an ongoing project and to ensure that any updates indicate clearly which parts of the notice reflect new information. Some updates were provided this year. These revised notices should preserve the content of the original notice as much as possible and should clearly indicate which material is new.

The ECO is concerned about the clarity and completeness of the content of information notices. As in past years, the ECO encourages ministries to ensure that all information notices are written in plain language and include the name, address, phone number and fax number of a ministry contact person.

*For ministry comments, see page 188-189.*

### Recommendation 1

**The ECO recommends that:**
ministries use information notices only when they are not required to post regular proposal notices.

## Exception Notices

In certain situations, the *Environmental Bill of Rights* relieves provincial ministries of their obligation to post environmentally significant proposals on the Registry for public comment.

There are two main instances in which ministries can post an "exception" notice, informing the public of a decision and explaining why it was not posted for public comment. First, ministries are able to post an exception notice under Section 29 of the *EBR*, where the delay in waiting for public comment would result in danger to public health or safety, harm or serious risk to the environment, or injury or damage to property (the "emergency" exception). Second, the ministries can post an environmentally significant proposal as an exception notice under Section 30 of the *EBR* when the proposal will be or has already been considered in another public participation process that is substantially equivalent to the requirements of the *EBR* (the "equivalent public participation" exception).

This year, the Ministries of the Environment and Natural Resources posted 22 exception notices under these Sections of the *EBR*, as follows:

| Ministry | Emergency Exception (Section 29 of the *EBR*) | Equivalent Public Participation Exception (Section 30 of the *EBR*) |
|---|---|---|
| MNR | 0 | 10 |
| MOE | 11 | 1 |
| **TOTAL** | **11** | **11** |

(Please refer to Section 3 of the Supplement to this report for a more detailed description of these notices.)

MOE's reasons for using exception notices appear to be acceptable. However, some of the notices provided scant details. For example, MOE posted six emergency exception notices for temporary expansions to waste management facilities. These expansions were granted to accommodate an increased need for waste processing during a City of Toronto labour dispute. The small amount of information provided in the notices would not, in most cases, have allowed the public to understand the potential impacts of the expansions. The notices also failed to include the name of a contact person to whom the public could direct inquiries or the dates when the expansions were approved.

In January 2001, the ECO became aware that MOE had issued orders for remedial work and preventative measures under the *Environmental Protection Act* against A.R. Clarke Limited, but had not posted a notice on the Registry. When ECO staff contacted MOE, ministry staff explained that the orders were issued on an urgent basis to ensure that proceeds of the company's sale, prior to a ruling on bankruptcy proceedings, could be directed toward environmental remediation. After being contacted by the ECO, MOE posted the emergency exception notice. The ministry should have posted this notice promptly and without the ECO's intervention.

This year, the Ministry of Natural Resources posted 10 equivalent public participation exception notices for regulations establishing or modifying parks and conservation reserves set out in Ontario's Living Legacy (OLL). In justifying its use of Section 30 of the *EBR*, MNR stated that it had already considered the environmentally significant aspects of these proposals through public consultation conducted under the OLL.

However, an *EBR* request for a review of the regulations and policies protecting the Mellon Lake Conservation Reserve (described on pages 135-138 of this annual report) raised the ECO's concern that

the boundary changes for the reserve were environmentally significant and beyond the scope of the previous OLL consultation process. When the ECO conveyed to MNR the need for public consultation through a regular notice posted on the Environmental Registry, the ministry acknowledged that boundary changes to this conservation reserve went beyond those specified in the OLL consultations and agreed to post a regular notice, providing an opportunity for public comment.

When park or conservation reserve boundary changes are environmentally significant and substantially different from those developed through the OLL process, the public should have an opportunity to comment through a regular notice posted on the Environmental Registry. The ECO will continue to monitor MNR's approach to posting notices related to this important issue.

*For ministry comments, see page 189.*

## Late Decision Notices: Excessive Time Used to Post Instrument Decision Notices on the Registry

One of the primary purposes of the *Environmental Bill of Rights* is ensure that the public can participate in the government's environmental decision-making process in an effective and meaningful manner. The aim of the Environmental Registry is to provide the public with reliable information on the status of ministry activities and proposals so they can participate in this decision-making. According to Section 36 of the *EBR*, each prescribed ministry must give notice of a decision on the Environmental Registry "as soon as reasonably possible" after a proposal is implemented. When ministries do not meet this responsibility in a timely way, the *EBR*'s leave to appeal process can be effectively undermined, and the result can be a loss of accountability and transparency in government decision-making.

Under Section 38 of the *EBR*, the public has the right to appeal most ministry decisions on Class I and Class II instruments – the permits, licences or certificates of approval needed before companies or individuals can carry out activities that have significant effects on the environment. Applications for leave to appeal must be filed with the appropriate appellate body no later than 15 days following the posting of the notice of decision on the Environmental Registry, or no later than 15 days after another member of the public's notice of appeal under another statute is placed on the Registry.

The example below illustrates how an excessive delay in posting an instrument decision notice can effectively deny members of the public their rights to ask for leave to appeal the decision. Moreover, the ECO is concerned that excessive delays in posting instrument decision notices are being used by ministries to circumvent possible appeals of contentious instrument proposals.

### Alpine Plant Foods Corporation (*EBR* Registry Number: IA8E0260)

- in February 1998, the Ministry of the Environment posted a proposal on the Environmental Registry to issue a certificate of approval (C of A) to Alpine Plant Foods Corporation, a liquid fertilizer manufacturing company, under Section 9 of the *Environmental Protection Act (EPA)*. The C of A proposal was for discharging ammonia-based emissions associated with the plant's industrial equipment.

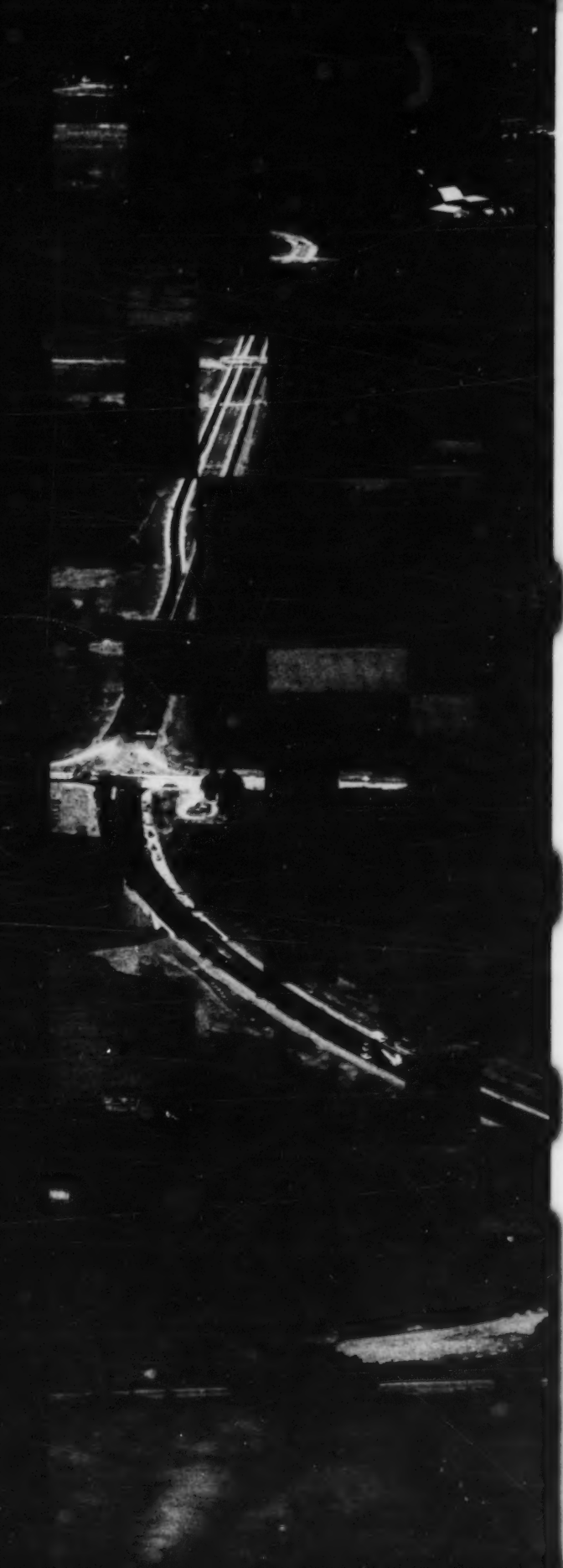
- MOE provided a 30-day comment period for this proposal, meeting the minimum requirements of the *EBR*. However, some members of the public voiced concerns that this did not give the public enough time to make informed comments. Although no comments were received by MOE during the official comment period, many comments were received after the comment period had ended. MOE stated that it considered these comments in making its decision. MOE did not, however, provide enhanced public participation opportunities, despite receiving several requests for added citizen involvement.
- The C of A was issued and came into effect on October 9, 1998. The decision notice was not posted until May 24, 2000, more than a year and a half after the instrument was implemented. The notice did not indicate the date when the C of A was granted.
- The implications of delaying the posting of this decision notice are clear. While the legal right was still available for the public to ask for leave to appeal when the decision was posted – 18 months after the instrument was implemented – no application for appeal was submitted. The delay between the issuance of the C of A and the notice of decision effectively weakened any grounds for appeal. Since the activity in question had been taking place for 18 months without the public's being aware of it, it would be difficult to argue that the decision was not environmentally sound. The final effect of this delay was to allow the implementation of an instrument that had generated obvious public concern without providing the public with full, up-to-date information on the status of the proposal.

The *EBR* creates the legitimate expectation on the part of the public that they will be notified of ministry decisions on instruments and then allowed the right to seek leave to appeal those decisions. An excessive delay in posting a decision creates a severe breach of the public's rights to procedural fairness and deserves reprimand as contrary to the spirit of the *EBR*.

The ECO has monitored the status of proposal notices for the 2000/2001 reporting period and noted that approximately 120 MOE instrument decisions had been posted on the Registry as proposal notices more than a year earlier. In over a dozen instances, MOE posted decisions for proposals which were originally posted on the Registry four or more years earlier. Notably absent in many instrument decision notices is the date of implementation (i.e., the date the C of A or Permit to Take Water is granted), which makes monitoring of the process all the more difficult.

The ECO contacts prescribed ministries for periodic updates on the status of proposal notices that have been on the Registry for more than one year. While time delays may be warranted in contentious or complex issues (some policies, Acts and regulations), in the case of instruments, the leave to appeal period is limited to 15 days following the posting of notice of the decision. Therefore, the sooner the public is informed of a decision, the sooner interested members of the public are able to participate in the decision.

The ECO will continue to monitor the Registry for the prescribed ministries' compliance with Section 36 of the *EBR*. In particular, the ECO encourages all prescribed ministries to post updates on proposals that are still under consideration, and that have been on the Registry as proposals for extended periods of time. Ministries should also include within the decision notice the date a decision came into effect. In light of the results of the ECO's monitoring of the Registry activities – and the example of the decision regarding Alpine Plant Foods Incorporated – the ECO cannot impress enough on the prescribed ministries the importance of improving the time frames for posting decision notices.



# Part 3

## Significant Issues - 2000/2001

### Significant Issues

Each year, the ECO highlights a number of environmental issues that have been the subject of recent applications under the *EBR* or are related to recent decisions posted on the Environmental Registry. This year most of the issues selected for special scrutiny happen to fall under the jurisdiction of MOE. For example, the management regime for several specialized categories of waste is described in the following pages – hazardous waste and also sewage sludge and septage. Some topics, such as air quality protection, have seen a great deal of policy attention and development over the last few years, resulting in a regulatory system that is in considerable flux. Other issues, such as MOE's compliance and enforcement strategy, have been marked by a recent reversal of policy direction. In yet other areas, such as the Ministry of Transportation's planning for public transit and Transportation Demand Management, the ECO has observed little apparent policy direction.

### Hazardous Waste

#### What is hazardous waste and how is it regulated in Ontario?

Wastes are considered hazardous if they are ignitable, corrosive, chemically reactive, toxic, or likely to spread disease. They include waste by-products from industrial processes such as waste acids, solvents, lubricants, paints, steel-making residues, contaminated sludges, PCBs, and

oils. Many household products, car batteries and biomedical or pathological wastes are also considered hazardous.

Ontario regulates hazardous wastes under Part V of the *Environmental Protection Act (EPA)*, primarily Ontario Regulation 347, the General Waste Management Regulation. This regulation was amended in October 2000 to change the way wastes are classified as hazardous. It had not been updated significantly since 1985.

In 2000, in order to harmonize O.Reg. 347 with the current U.S. Environmental Protection Agency regulations, MOE added more types of wastes to the lists of hazardous wastes, and introduced a more rigorous test to see if wastes are likely to leach toxic contaminants. (For a discussion of these regulatory changes for hazardous waste, see pages 103-106 of this annual report.)

Under the *EPA* and O.Reg. 347, wastes classified as "hazardous" or "liquid industrial" are "subject wastes," which must be registered, tracked if moved off-site, and disposed of in specially licensed sites. All disposal facilities, whether on-site or off-site, require certificates of approval under the *EPA* and may also require approval under the *Environmental Assessment Act (EAA)*. The requirements for registration, handling and disposal were not changed.

## How much hazardous waste is there?

The Ontario Waste Generator Database, which is supposed to document the amount of waste produced in the province, has not been fully kept up to date, according to the Provincial Auditor and others. Because this generator database is unreliable and because only some waste is tracked, it is difficult to estimate the total amount of hazardous waste produced in the province. But it could be between three and four million tonnes per year. The volume of tracked hazardous waste increased by roughly 40 per cent between 1994 and 1998, with most of the increase due to leachate liquid collected from landfills and sent to municipal sewage treatment plants.

MOE's changes to O.Reg. 347 in October 2000 will result in significantly more wastes being considered hazardous. MOE couldn't quantify the expected increase, but said that when the new toxicity test was introduced in the U.S., the quantity of waste considered hazardous doubled.

The increasing quantities of U.S. hazardous waste entering Ontario pose a real concern. In 1998, about 12 per cent of all hazardous waste tracked in the province was imported from the U.S. The total amount of waste imported from the U.S. increased by roughly 135 per cent between 1994 and 1998, while exports from Ontario to the U.S. rose by 66 per cent. In 1998, about 30 per cent of the imported U.S. waste was sent for recycling and 70 per cent for disposal. About half went to the Safety-Kleen landfill near Sarnia. U.S. waste comprised half the waste received at that landfill by 1998, an increase of over 250 per cent since 1984. Reasons for the increase in U.S. imports are commonly thought to include:

- Ontario standards for disposal are weaker than the U.S. standards. For example, Ontario allows landfilling of hazardous wastes banned from U.S. landfills since 1994.
- The cost of disposal is lower in Ontario.
- There are different rules for liability. In Ontario, once a waste is accepted by a receiver, the liability for future environmental harm is transferred. In the U.S., it stays with the generator under "extended liability" rules.

## Where does the hazardous waste go?

MOE's system for tracking the movement of hazardous wastes – the Waste Manifest Database – provides limited information. Generators of waste have to fill in and submit forms (manifests) that can be used to track the movement of hazardous wastes from generation to disposal. Because the system was introduced to control illegal dumping of hazardous wastes, MOE tracks only the off-site transfers of wastes, estimated to be about 60 per cent of the total amount of hazardous wastes generated in Ontario. The fate of the other 40 per cent of subject wastes is largely unknown because little reporting is required for on-site disposal. A few large industrial facilities have a landfill or incinerator on-site, and an estimated 32,000 facilities discharge hazardous or liquid industrial wastes directly into municipal sewers, some legally and some illegally. Some leachate collected from landfills goes directly into municipal sewage treatment plants and is unreported as well.

About 35 per cent of the tracked waste is landfill leachate trucked to municipal sewage treatment plants. For the rest of the hazardous waste sent off-site, disposal options are landfilling, incineration, or export for treatment not available in Ontario. Some wastes are also recycled or reused and some are burned as fuels. Ontario has a few facilities licensed to incinerate PCBs and biomedical or pathological waste. But most of the non-leachate hazardous waste produced in Ontario is disposed of at the Safety-Kleen facility near Sarnia, which has a landfill and an incinerator. Most liquid hazardous industrial waste is incinerated at the Safety-Kleen facility. The incinerator cannot handle solids, sludges, chlorinated organic chemicals or flammable wastes, so these are exported to the U.S. or other provinces to be incinerated in high-tech incinerators or rotary kilns.

## Does Ontario have adequate treatment and disposal capacity?

In the early 1980s, the provincial government believed there was a pressing need to establish publicly owned facilities for treatment and disposal of hazardous and liquid industrial waste, and a Crown agency was created to develop and operate an integrated hazardous waste facility. However, the application for the proposed facility was turned down on technical grounds in a 1994 environmental hearing board decision, even though the board agreed that the province had inadequate treatment and disposal capacity for hazardous wastes. In 1995 the provincial government terminated the Crown agency and discontinued planning for hazardous waste treatment and disposal. MOE now relies solely on the private sector to establish facilities according to market demand. To date, the only major private sector disposal facility has been expansion of the Safety-Kleen landfill in 1997. Several treatment and processing facilities have also been established or proposed.

The Safety-Kleen landfill continues to fill more quickly than projected. In December 2000, MOE estimated it had only five years of capacity left. Reports suggest that Safety-Kleen has purchased an additional 1,000 acres of land surrounding the landfill, but as of April 2001, had not yet applied to the ministry for approval of a further expansion. The company has applied for permission to increase the quantity of waste incinerated to respond to the increased demand expected as a result of the changes to O.Reg. 347.

There have been significant concerns raised lately about the environmental impacts of the Safety-Kleen landfill and incinerator. The expansion of the landfill was approved by MOE under the *EAA* and *EPA* in 1997 under a new rule that removed the *EPA* requirement for mandatory public hear-

ings. Since then the public has continued to raise concerns about the landfill's integrity, especially since the discovery of a leak and a number of fires.

Two *EBR* applications were received in late 2000 requesting that MOE review the certificates of approval for the Safety-Kleen facility. The ministry did not take any action as a result of the *EBR* applications, and suggested that it was up to the company to initiate improvements. Furthermore, the ministry appeared to be avoiding public scrutiny or input into its decisions, by not clearly telling the applicants about Safety-Kleen's current proposals for amendments to its Cs of A. Public confidence in the facility and in MOE's ability to regulate it are very low. (The ECO's report on MOE's response to these requests is found on pages 139-143 of this annual report.)

### Is further review of MOE's hazardous waste management policies required?

In 1998 the Canadian Institute for Environmental Law and Policy (CIELAP) submitted an *EBR* application for review of MOE's hazardous waste management regime. MOE turned down that application, saying that some of the matters raised were already under review. The ECO reported in the 1998 annual report that MOE did not adequately reply to many of the issues raised.

In late 1999, MOE launched its "six-point action plan" to strengthen Ontario's regulation of hazardous waste, and a ministry news release described the plan:

> The minister has directed a thorough review taking into account all information, policies and recommendations designed to improve environmental protection, including those in use by the US Environmental Protection Agency. Updating these regulations will provide tighter control of hazardous wastes throughout the province, increased transparency between the US and Ontario rules, and improved environmental protection in Ontario.

In late 1999, CIELAP submitted another *EBR* application requesting a review of the need for broader reforms to the regulatory system, including changes to the approvals process for hazardous waste sites. They also requested that Ontario adopt U.S. rules – such as land disposal restrictions that ban untreated hazardous wastes from landfills – as interim measures, while the ministry carried out its review. MOE denied the application, but gave the impression that it was still reviewing other issues, saying the ministry is "committed to further reviewing its hazardous waste regulation and further initiatives, including land disposal restrictions, are under consideration."

In February 2000, MOE proposed further amendments to O.Reg. 347 to strengthen the rules for characterizing wastes as hazardous by adopting the lists and tests in the U.S. rules. The changes, finalized in October 2000, will improve environmental protection, because they will keep more potentially hazardous wastes out of non-hazardous waste landfills. But the proposed amendments did not strengthen Ontario's rules for handling and disposal of hazardous wastes. Many stakeholders commenting on the proposals advised the ministry that the changes were a positive step, but unless they are accompanied by the tougher U.S. standards for disposal, the large volume of hazardous waste flowing into Ontario from the U.S. would continue unabated.

MOE continued to tell the ECO during 2000 that it was reviewing the need for land disposal restrictions. In November 2000, however, the ministry announced that "the province has now fulfilled its

six-point action plan" and in a February 2001 report to the ECO, MOE made it clear there would be no further ongoing review.

### ECO Comment

The ECO concludes that there is still a major need for improvements in the policies regarding hazardous waste. The Safety-Kleen landfill remains a magnet for U.S. wastes. Given capacity pressures, lack of alternative disposal options, public concerns and recent environmental problems, the ministry should undertake a more comprehensive review. Many of the issues raised in recent *EBR* applications remain unaddressed. For example the ministry doesn't have adequate data about or regulation of the significant amounts of hazardous wastes disposed of on-site, or discharged into sewers.

The ECO believes MOE should address these problems. The ministry should examine why U.S. imports of hazardous waste are rising, and should consider adopting the U.S. rules such as land disposal restrictions and extended liability. The ministry should also put more effort into pollution prevention, to reduce the generation of hazardous wastes in Ontario. Finally, the ministry should be more open and forthcoming about the status of its policy reviews. MOE gave the impression with its six-point action plan that the ministry was going to overhaul its hazardous waste management regime. Instead, MOE undertook only limited measures and misled applicants and the ECO about the scope of its review. Actions such as these undermine public confidence in the ministry. In order to restore public confidence, MOE should carry out a broader and more transparent review of its overall approach to hazardous waste management.

*There have been recent developments on some of these issues. See ministry comments on pages 189-190.*

## Recommendation 2

**The ECO recommends that:**

MOE carry out a broad and transparent review of its overall approach to hazardous waste management, including an examination of why imports of U.S. hazardous wastes are rising.

## Management of Septage and Sewage Sludges

### Background

In the fall of 2000, the ECO received an application for review under the *EBR* that raised concerns about the practice of applying wastes from septic tanks and portable toilets to farmland. The technical term for these wastes is "septage" or "hauled sewage," because they are pumped out and hauled by truck. The applicants emphasized the need for a consistent policy and enforceable regulations, and they requested that the spreading of these wastes on farmland be stopped immediately until studies could be done on its safety for public health and the environment. The Ministry of the Environment decided to deny this request, stating that the ministry was already carrying out an internal review of the province's septage-spreading program. Although MOE did not advise the

six-point action plan" and in a February 2001 report to the ECO, MOE made it clear there would be no further ongoing review.

### ECO Comment

The ECO concludes that there is still a major need for improvements in the policies regarding hazardous waste. The Safety-Kleen landfill remains a magnet for U.S. wastes. Given capacity pressures, lack of alternative disposal options, public concerns and recent environmental problems, the ministry should undertake a more comprehensive review. Many of the issues raised in recent *EBR* applications remain unaddressed. For example the ministry doesn't have adequate data about or regulation of the significant amounts of hazardous wastes disposed of on-site, or discharged into sewers.

The ECO believes MOE should address these problems. The ministry should examine why U.S. imports of hazardous waste are rising, and should consider adopting the U.S. rules such as land disposal restrictions and extended liability. The ministry should also put more effort into pollution prevention, to reduce the generation of hazardous wastes in Ontario. Finally, the ministry should be more open and forthcoming about the status of its policy reviews. MOE gave the impression with its six-point action plan that the ministry was going to overhaul its hazardous waste management regime. Instead, MOE undertook only limited measures and misled applicants and the ECO about the scope of its review. Actions such as these undermine public confidence in the ministry. In order to restore public confidence, MOE should carry out a broader and more transparent review of its overall approach to hazardous waste management.

*There have been recent developments on some of these issues. See ministry comments on pages 189-190.*

## Recommendation 2

**The ECO recommends that:**

MOE carry out a broad and transparent review of its overall approach to hazardous waste management, including an examination of why imports of U.S. hazardous wastes are rising.

## Management of Septage and Sewage Sludges

### Background

In the fall of 2000, the ECO received an application for review under the *EBR* that raised concerns about the practice of applying wastes from septic tanks and portable toilets to farmland. The technical term for these wastes is "septage" or "hauled sewage," because they are pumped out and hauled by truck. The applicants emphasized the need for a consistent policy and enforceable regulations, and they requested that the spreading of these wastes on farmland be stopped immediately until studies could be done on its safety for public health and the environment. The Ministry of the Environment decided to deny this request, stating that the ministry was already carrying out an internal review of the province's septage-spreading program. Although MOE did not advise the

applicants when this review might be completed, the ministry did commit to posting any resulting environmentally significant proposals on the Environmental Registry. Several months after the application was denied, MOE informed the ECO that it had launched an internal review of policies regarding the land application of sewage sludge, septage and pulp and paper sludge, with a formal *EBR* consultation – a notice posted on the Environmental Registry – planned for spring and summer of 2001. (For a full description of this *EBR* application, see Section 5 of the Supplement to the annual report.)

On March 5, 2001, the ECO received another *EBR* application for review, dealing with sewage sludge. Sewage sludge is the settled residue from municipal sewage treatment plants. In this case, the applicants asked that MOE approvals for spreading sewage sludge on land be posted for public comment on the Environmental Registry. Currently such approvals are not subject to the *EBR* because MOE did not include them in its list of classified instruments under the *EBR*. (The ECO will report on the outcome of this application in our 2001/2002 annual report.)

## Weak Enforcement

The ECO has received a wide range of complaints from individuals, citizens' groups and farmers about MOE's enforcement of rules governing the land application of both sewage sludges and septage. There are also complaints that the rules themselves are not strong enough. The ECO has heard complaints asserting that MOE does not require landowner approval for spreading of sewage sludge, does not adequately monitor volumes of waste being spread onto sites, does not hold back sludges from land spreading while their quality is being tested, does not enforce minimum digestion times, does not deal firmly with persistent violators, and is reluctant and unhelpful about carrying out groundwater tests when residents complain of well water contamination.

In one case, *EBR* applicants say that some MOE staff do not consider it within their mandate to enforce guidelines outlined in certificates of approval (C of A) for septage spreading. They also allege that MOE repeatedly renewed the C of A for a septage-spreading site without adequately considering nearby new homes and without having full records of waste quantities being disposed there.

In another recent case, residents allege that MOE did not inspect a septage-spreading site before issuing an approval. They state that only after a large volume of septage had been spread onto the site over a six-week period, MOE sent a hydrogeologist to the site, who determined that it was unsuitable, and that the permit should be revoked. These residents allege that the incident has caused bacterial contamination of their wells.

The ECO has in past years already reported on some aspects of the land spreading of human, animal and other organic wastes. The ECO's 1999/2000 annual report described the environmental impacts of the huge manure volumes produced by new intensive farm operations. Similarly, the ECO's 1998 annual report described how the land spreading of pulp mill wastes is regulated. This discussion focuses on septage and municipal sewage sludge. Other categories of organic wastes such as abattoir wastes, fats, oils and greases are also spread onto farmlands in Ontario, but are not specifically addressed in the discussion below.

## Sewage Sludge Handling and Environmental Impacts

Municipal sewage treatment plants are designed to produce a liquid effluent that is clean enough to meet rules for discharging back into lakes and rivers. At the primary and secondary states of treatment, solid materials are settled out from the process. Sewage treatment plants treat these solids first by bacterial decomposition, through either aerobic or anaerobic digestion. The resulting material is called stabilized sewage sludge. The stabilizing process substantially reduces pathogen numbers (viruses, bacteria, fungi and protozoa) in sewage sludge, but does not eliminate them.

Approximately 7.5 million cubic metres of stabilized sewage sludge (often also called biosolids) are produced by Ontario municipalities each year, and they must be disposed of somehow. In 1994, MOE estimated that approximately 55 per cent of this sewage sludge went to landfills, 27 per cent was incinerated, and 18 per cent was applied to agricultural lands. Land application is becoming more widespread in Ontario, although current estimates are not available. One reason for the increase in land application is that it is cheaper. For example, Durham Region in southern Ontario has reported that incineration of its sludge is 15 per cent more expensive than land application. The air pollution and odour complaints associated with sludge incineration have also encouraged cities to make the shift to land spreading. The City of Toronto, which produces 80,000 tonnes of sewage sludge a year, is working toward phasing out incineration, and in 1999 spread about one-third of its sludge on farmlands.

Land application of sewage sludge is not only cheaper; when carefully applied, sludge can also provide some fertilizing and soil conditioning values. According to the Ontario Ministry of Agriculture, Food and Rural Affairs, farmers who spread sewage sludge on their lands can save about $100 an acre in fertilizer costs for nitrogen and phosphorus. However, farmers need to consider many factors in order to use these nutrients to their best effect and to minimize runoff into groundwater, streams and rivers. Farmers also need accurate and up-to-date information on the nutrient content of both the sludge and the receiving soil in order to allow them to calculate the agronomic application rate, i.e, the optimal loading of nutrients that will meet crop needs without exceeding what the crops can absorb.

To be useful to crops, sludge must also be applied at the right time of year. For example, phosphorus must be available to seeds at the time of germination, and nitrogen, if applied in the fall, can interfere with the normal dormancy process for overwintering crops. The windows of opportunity for sludge spreading are further narrowed to times when fields are bare, to avoid damaging crops with heavy equipment. But early spring and late fall are also often the wettest seasons, when rains may wash freshly applied sludge into waterways, and when wet soils may be damaged by compaction from heavy truck traffic.

Significant environmental damage can occur when sewage sludge is washed into waterways. The predominant risk is that groundwater, creeks and rivers can be polluted by phosphorus and nitrogen, leading to algal blooms, oxygen depletion and fish kills. Pathogens are also a concern, since they may migrate into groundwater or surface water and contaminate drinking water supplies.

There are also concerns about the environmental impacts of contaminants in sewage sludge, particularly heavy metals and industrial organic chemicals. The most common fate of hazardous and indus-

trial wastes is to be poured into municipal sewer systems, and to end up in sewage treatment plants. Close to 400,000 tonnes of such wastes are disposed of this way in Ontario annually, according to a 1991 estimate. To address this concern, OMAFRA recommends that sewage sludge should not be used on crops with leaves or roots that will be used for human consumption, and would be best used on seed or grain crops which are less likely to accumulate heavy metals. As well, researchers have begun to investigate the fates of pharmaceuticals such as antibiotics and a wide range of endocrine-disrupting substances after they enter municipal sewer systems.

## Septage Handling and Environmental Impacts

Septage or "hauled sewage" includes waste pumped from domestic septic tanks when they are periodically cleaned, as well as holding tank waste and waste from portable toilets. This material is primarily human faeces and other toilet waste, as well as waste from showers, bathtubs, kitchen and laundry sinks.

MOE estimates that there are over 1.2 million private sewage systems in Ontario, most of which are septic tanks, serving more than 2.5 million people. According to MOE estimates, 1.2 million to 1.75 million cubic metres of hauled sewage are pumped from these systems each year, although some industry estimates are higher. Ontario has approximately 1,500 to 1,700 sewage hauling companies operating, and most of these are small, one-truck operations.

The disposal options for Ontario sewage haulers include either dumping into sewage treatment plants or sewage lagoons, or land application. MOE does not provide estimates on how widespread each of these disposal options are, but according to one industry view, the vast majority of hauled sewage in Ontario is applied to farmland, because very few sewage treatment plants or sewage lagoons are able to accept the added volume. Many sewage treatment plants in Ontario are aging, and with population growth, are also reaching their operating capacity. MOE recommends that sewage treatment plants operating at or near their hydraulic or organic capacity should not accept hauled sewage. High treatment and trucking costs also discourage the use of sewage treatment plants.

Once spread on land, the potential environmental impacts of septage and municipal sewage sludge are in many ways similar. Both types of waste contain nutrients that may contaminate waterways if they are not taken up by crops, and both may contain trace contaminants such as heavy metals. But septage is likely to have much higher concentrations of live pathogens such as bacteria and viruses than municipal sewage sludge. This is because MOE does not require any treatment of septage to cut down pathogen levels before land application. Septage can include waste from portable toilets, and their disinfectant chemicals can also be an environmental concern.

Although municipal sewage sludge and septage are similar materials with similar environmental impacts, they are regulated very differently in Ontario.

## Regulation of Land Spreading of Septage

In April 1998, the regulation of septic systems was transferred from the Ministry of the Environment to the Ministry of Municipal Affairs and Housing, which administers the *Building Code Act*. MOE retained the oversight of sewage haulers, however, and made a number of changes, mainly house-

keeping, to the pertinent regulatory system, but did not substantially change its content. Under Part V of the *Environmental Protection Act*, sewage haulers must now have a certificate of approval for a Hauled Sewage Waste System. This C of A covers the business and equipment, the septage disposal sites, and how the system is operated. Haulers under the pre-1998 system had to provide the ministry with some basic information in order to convert their old licences to the new certificates of approval. Haulers were also able to continue using their old disposal sites, provided that they met certain conditions. Under the new regulatory structure, septage disposal sites, once they are approved by the local MOE office, become part of a "schedule" attached to the certificate of approval.

Sewage haulers who request MOE approval for a new disposal site must pay a $100 fee, fill out a three-page form and provide a sketch of the site showing relevant features, setback areas and spreading locations. Since these approvals are not classified as instruments under the *EBR*, MOE is not required to post a proposal notice for public comment on the Environmental Registry. In some cases, MOE staff may visit the site before they issue an approval. No testing of soils or wastes is required.

A regulation under the *Environmental Protection Act* states that septage shall not be applied in a manner that permits it to enter a watercourse or drainage ditch, or results in runoff leaving the site. The same regulation also requires that the owner of the site provide written authorization for the spreading. MOE has established minimum setback guidelines that state that septage storage or spreading must be a minimum of 90 metres from water wells, and at least 120 metres from surface waters. These setbacks may be reduced by 50 per cent in some cases. According to the guidelines, the slope of the land should not be greater than 9 per cent, and spreading during periods when ground is frozen or snow-covered must be approved by an MOE Director on a site-by-site basis. According to media reports in February 2001, MOE began prohibiting winter spreading of septage in early 2001. However, this change was not posted on the Registry. The guidelines also set restrictions (subject to amendments by an MOE Director) on future uses of the land. For example, livestock should not graze on a site within six months of septage application, and feed crops should not be harvested within three weeks of application.

MOE District staff also rely on an internal document entitled "Former Chapter 13" to assess applications for septage disposal. The document states that septage may be either spread onto the surface of soil or incorporated into soil by mechanical injection or a similar method. Depositing septage into old sand or gravel pits, especially in winter, is also considered an option. While the document recommends spreading the septage as evenly as possible, it acknowledges that varying truck speed may be the only means of doing this. It also recommends that "if possible, avoid application within 24 hours of heavy rains or just before rain." A general rule of thumb for nitrogen is also offered: "If the amount of hauled sewage applied each year is restricted to one million litres per hectare (or 100L/square metre ) the nitrogen load should not exceed crop needs. This loading should also provide reasonable protection to the ground water."

## Regulation of Land Spreading of Sewage Sludge

Land application of municipal sewage sludge is also regulated under Part V of Ontario's *Environmental Protection Act*, and O. Reg. 347. Municipalities or contractors must apply to MOE for

a certificate of approval for an "organic soil conditioning site." These Cs of A typically contain very site-specific conditions and also require compliance with a short list of general standards set out in O.Reg.347. (A separate C of A is required for storage facilities for sewage sludge.) Before issuing a C of A, ministry staff inspect proposed sites for conformity both with the regulation and with a lengthy document entitled Guidelines for the Utilization of Biosolids and Other Wastes on Agricultural Land (the Guidelines). But it is not clear whether MOE always includes a condition requiring ongoing compliance with the Guidelines in each C of A. In the absence of such a condition, the Guidelines are not enforceable.

The Guidelines are a mix of many recommendations and a few requirements, covering testing of soils and sludges, spreading rates, separation distances from surface water, residences and wells, record-keeping requirements and the responsibilities of spreading operators and farmers. The Guidelines note that all sewage sludge must be stabilized before being spread, and that the number of pathogenic organisms must be reduced "to an acceptable level." They recommend caution when spreading wastes onto snow-covered or frozen ground, but allow it on flat fields, provided that the risks of runoff are minimal. The Guidelines say that "waste materials containing high concentrations of industrial organic chemicals will not receive approval for land application," but don't define "high concentrations" nor do they require testing for these parameters.

MOE provides no opportunity for public consultation on approvals for land spreading of sewage sludge, since they are not classified as instruments under the *EBR*. Thus, there is no information posted on the Environmental Registry, no public comment opportunity, and no opportunity for the public to request either leave to appeal or a review under the *EBR*, once an approval is issued.

In November 2000, MOE responded to intense public concern and allowed a one-day public comment period on a major approval for sludge spreading by Azurix North America – despite the fact that this approval is for City of Toronto sludge, and is expected to have implications for numerous municipalities serviced by the company across Ontario. Nor was the province's own Biosolids Utilization Committee consulted on the approval. One unexpected outcome of this approval is that it formally removed the opportunity for other municipalities to reject Toronto sludge for spreading on their lands.

In late 1998, MOE proposed a major streamlining of many types of approvals, including approvals for land spreading of sewage sludges, by developing Standardized Approval Regulations (SARs). Under this approach, proponents would have to send a start-up notice to the ministry along with certain background information and a fee, and would have to comply with the SAR's provisions, but would be otherwise exempt from the approvals system. Presumably, the ministry would no longer impose site-specific conditions, since the SAR would contain uniform, province-wide requirements. The ministry did publish a draft SAR for land spreading of sewage sludges, but has not provided recent updates, and it is not clear whether the ministry still plans to proceed with this approach.

## Inadequacies in Existing Rules

The ECO's review of existing policies and regulations for the land spreading of sewage sludge and septage has concluded that they are not adequate to protect the environment, even if they were consistently and firmly enforced. Ontario's existing rules for the land spreading of sludge and septage are

## Problems with Ontario's Existing Rules for Sewage and Septage Spreading

### No nutrient management plans required

In 1995, OMAFRA's Sewage Biosolids Survey Team recommended that nutrient management plans be established for all approved sewage sludge utilization sites, but the current rules still allow sewage sludges and septage to be spread onto farmlands without requiring accurate, current information about nutrient loads being applied, soil or weather conditions, or actual crop nutrient needs over a given season. This greatly increases the risks of nutrient run-off to surface or groundwater. As well, under the current regulatory structure, the same piece of land could receive both manure and sludges without regard for total nutrient loads or real crop needs.

### No protection for groundwater recharge areas or other environmentally sensitive areas

The current rules allow sewage sludges and septage to be spread onto farmlands without recognizing that some lands (such as sandy recharge areas) are more prone to contamination than others. Protection of such sensitive areas would require accurate, current information about local groundwater conditions, such as the depth of aquifers, the quality of groundwater, the number of nearby wells that rely on these aquifers, or the prevailing direction of groundwater movement.

### No public notice of spreading activities via the *EBR*

MOE is not required to post notice of proposed approvals for sludge or septage spreading sites on the Environmental Registry. This means that members of the public get no advance notice of spreading, no opportunity to comment, and no right to request appeals of any approvals. Neighbours who may want to do baseline tests of their well water before the spreading starts get no advance warning. Neither do people with special health concerns.

### No public registry of spreading sites

Without public information about quantities or locations of sludge or septage spreading, it is not possible to estimate the total sludge loadings to any given watershed in any given year. In 1995, OMAFRA's Sewage Biosolids Survey Team recommended the establishment of a more consistent and complete record-keeping system to allow future monitoring and verification of utilization sites.

### No requirement that operators be trained and certified

To prevent environmental problems, operators must understand and make decisions about a host of biological, agricultural and chemical parameters whenever they apply sludges or septage. Ontario farmers who accept municipal sewage sludges onto their lands have noted the need for better education of equipment operators, and better information-sharing with farmers. Certification is already required for pesticide spraying on farmlands, and training may soon be required for manure spreading. An extensive 200-page training manual was produced by MOE and OMAFRA in 1994 for sludge spreading, but it is not clear whether this document was widely distributed or recommended to operators.

### No restrictions on applications onto tile-drained lands

A very significant proportion of Ontario farmlands have tile drains, which may lie just below the plowing depth and carry away excess rainwater to nearby streams and rivers. Ontario research has shown that sludges applied to these lands can enter tile drains within minutes of application, and are directly polluting waterways.

### No prohibition against land application onto frozen soil

Current Ontario rules for both sewage sludge and septage spreading do include some cautions regarding land spreading on frozen soil, but the practice is clearly permitted in some circumstances. Since sludges and septage are produced all through the year, it is very likely that significant volumes of these waste materials are being spread when risks of run-off are high.

## Rules in Other Jurisdictions

Land application of sewage sludge and septage is widely practised, but the rules vary from jurisdiction to jurisdiction. The examples listed below are a small sampling of how some U.S. jurisdictions are attempting to reduce environmental impacts of these activities.

### Sewage Sludge nutrient management plans

The State of Maryland requires nutrient management plans for nitrogen from sludges and manures by the end of 2001, and these plans must be implemented by the end of 2002. Nutrient management plans for both nitrogen and phosphorus must be implemented by the end of 2005.

### Protection of aquifers

The State of Texas requires that sewage sludge placed on an active sludge unit shall not contaminate an aquifer. This must be demonstrated either through the results of a groundwater monitoring program developed by a qualified groundwater scientist, or through certification by a qualified groundwater scientist.

### Buffer zones

The State of Maine requires that no sludges be utilized within 75 feet of a river, perennial stream or great pond. The resulting buffer zones must be vegetated during application and the following growing season. Buffer zones must be inspected just prior to each spreading, and any areas showing erosion must be repaired, re-contoured and reseeded.The State of Maine allows adjacent property owners to request that sludge not be applied to land within 50 feet of their property boundary.

### Restrictions on winter spreading

U.S. federal rules prohibit land application of sewage sludge on a site that is flooded, frozen or snow-covered in such a way that the sewage sludge will enter a wetland or other waters.

### Tax credits for better equipment

The State of Virginia provides 25 per cent tax credits to farmers on the purchase of more precise nutrient and pesticide application equipment if the equipment meets state specifications, and if the farmer is willing to prepare a nutrient management plan.

## Septage

### Stabilizing septage

U.S. federal rules (in force throughout the United States) impose grazing and public access restrictions to lands where septage has been applied if the septage has not been stabilized by treatment with lime. Public access restrictions may include no trespassing signs and/or fencing in some instances. But if septage is stabilized and its pH is raised to at least 12 before land application, then grazing and site restrictions are waived, although crop harvesting restrictions still apply.

### Testing septage application sites

The State of Maine requires septage land application sites to undergo an annual soil sampling and analysis for available nitrogen phosphorus, potassium, calcium and magnesium, among other parameters.

### Protection of aquifers

The State of Maine does not allow septage land application sites to overlie significant sand and gravel aquifers.

### Restricting public access

The State of Maine prohibits public access to septage utilization sites and requires operators to have large signs posted at all vehicle access points.

not founded on the need to protect ecosystems, and they also fail to provide opportunities for the public to be involved in environmentally significant decisions. A number of major weaknesses, common to both sets of rules, are outlined on page 54. As well, even though septage presents a greater risk of introducing pathogens into the environment, Ontario's septage spreading rules are weaker in the following ways:

- There is no requirement in Ontario that septage be stabilized to reduce pathogens prior to land spreading, even though Ontario's Biosolids Utilization Committee recommended this several years ago.
- There is no requirement that septage spreading be of benefit to soil and crops. In contrast, Ontario guidelines for land spreading of municipal sewage sludges do state that "these materials must be of benefit to crop production or soil health and not degrade the natural environment."
- There is no requirement for adequate septage storage. The times when septage can safely be spread are limited by weather conditions and crop needs. But when storage facilities fill up, operators face great pressure to spread septage, even if fields are wet, frozen or otherwise unsuitable. In contrast, Ontario guidelines for land spreading of municipal sewage sludges do state that sufficient storage must be available, and that a minimum of six months of storage will normally be adequate.
- There is no MOE or industry-funded research into better environmental management of septage.
- There is no certainty that MOE staff inspect sites before approving them.

## Conclusions

The ECO's review has found significant weaknesses in the current legislation and practices governing the land spreading of sludges and septage. There are evident problems in both the regulatory regime and in the way the existing rules are being enforced. MOE appears to have recognized this, and has launched an internal review of policies regarding the land application of sewage biosolids, septage, and pulp and paper sludge. MOE has informed the ECO that OMAFRA and MMAH are involved in the process, that pre-consultations with key stakeholders have begun, and that formal consultations through the *EBR* process will occur in the late spring and early summer of 2001.

MOE should ensure that its policy review of these matters addresses the need for ecosystem protection and that approaches such as nutrient management planning and protection of groundwater recharge areas are considered. MOE should also address the need for the public to have a voice in environmentally significant decisions, both at the broad policy level and on more local site-by-site decisions. To allow for informed public comment, MOE should provide current information on existing trends and patterns of sludge and septage management in Ontario, as well as current information on environmental impacts.

*There have been recent developments on this issue. For ministry comments, see pages 190-192.*

## Recommendation 3

**The ECO recommends that:**

MOE and OMAFRA ensure that the new legislation and policies for sewage sludge and septage address the need for overall ecosystem protection, as well as protection of groundwater recharge areas.

# Transportation and Land Use Planning for the GTA

## Introduction

The Greater Toronto Area's worsening traffic congestion has become a major frustration for individuals and a drag on the region's economic productivity. But the problem also has direct impacts on the environment and the ecosystem, especially on air quality and land use. In response to congestion, yet more highways, interchanges and other infrastructure are constructed, not only consuming large quantities of land, but also promoting still more urban sprawl. Urban sprawl has been the forerunner to traffic congestion, and the two phenomena have worked together in a vicious cycle to accelerate the paving over of much of the Greater Toronto Area (GTA), including vast acreages of Class 1 agricultural lands and important headwater areas for streams and rivers flowing into Lake Ontario.

Population growth has been particularly rapid in the GTA's suburban regions and, unfortunately, has taken place without the Ministry of Transportation's insisting on coordinated transit planning. Car-dependent commuters created the pressure for a new highway ring to the north, the 407 Highway, which in turn has spurred further low-density development, placing intense development pressures today on the Oak Ridges Moraine and on its forests, groundwater and wildlife habitats.

## The Prognosis

Most experts predict that traffic congestion in the GTA will get a lot worse during the next decade. Demographic trends suggest that the population of the region will grow by another million to about five million people, and that new residents increasingly will settle in the suburban areas, where low-density development dictates that only rudimentary public transit will be feasible. In the past, the traditional "suburbs to downtown" commuting pattern has been relatively well-served by public transit. Increasingly, however, commuters will be traveling from one suburban area to another, relying overwhelmingly on cars, and lengthy commuting times will continue to degrade the quality of life. But the alternative to cars – public transit – is also under pressure in the GTA. GO Transit cannot meet total current demand, which is predicted to double by 2021.

### Vehicles and Air Pollution

The air emissions of the transportation sector in the Greater Toronto Area are hard to ignore. Smog is a growing concern for the GTA, and road vehicles are important sources of the precursor chemicals that help to form smog. According to the Ministry of the Environment, the transportation sector is responsible for an estimated 60 per cent of Ontario's nitrogen oxide (Nox) emissions and over 30 per cent of its volatile organic compound (VOC) emissions. Ground-level ozone peaks are typically higher in Toronto than in Vancouver or Montreal. Carbon monoxide (CO) levels also tend to be higher than elsewhere in Ontario because of vehicle emissions. A 1990 City of Toronto study that looked at air pollutants at "nose level" on a number of city streets found that concentrations of CO and NOx closely followed patterns of hourly traffic volume, suggesting that Toronto itself is the origin of most of its CO and NOx pollution. Transportation emissions also have global environmental impacts since they are major contributers to greenhouse gases, accounting for approximately one-third of Ontario's total emissions.

not founded on the need to protect ecosystems, and they also fail to provide opportunities for the public to be involved in environmentally significant decisions. A number of major weaknesses, common to both sets of rules, are outlined on page 54. As well, even though septage presents a greater risk of introducing pathogens into the environment, Ontario's septage spreading rules are weaker in the following ways:

- There is no requirement in Ontario that septage be stabilized to reduce pathogens prior to land spreading, even though Ontario's Biosolids Utilization Committee recommended this several years ago.
- There is no requirement that septage spreading be of benefit to soil and crops. In contrast, Ontario guidelines for land spreading of municipal sewage sludges do state that "these materials must be of benefit to crop production or soil health and not degrade the natural environment."
- There is no requirement for adequate septage storage. The times when septage can safely be spread are limited by weather conditions and crop needs. But when storage facilities fill up, operators face great pressure to spread septage, even if fields are wet, frozen or otherwise unsuitable. In contrast, Ontario guidelines for land spreading of municipal sewage sludges do state that sufficient storage must be available, and that a minimum of six months of storage will normally be adequate.
- There is no MOE or industry-funded research into better environmental management of septage.
- There is no certainty that MOE staff inspect sites before approving them.

## Conclusions

The ECO's review has found significant weaknesses in the current legislation and practices governing the land spreading of sludges and septage. There are evident problems in both the regulatory regime and in the way the existing rules are being enforced. MOE appears to have recognized this, and has launched an internal review of policies regarding the land application of sewage biosolids, septage, and pulp and paper sludge. MOE has informed the ECO that OMAFRA and MMAH are involved in the process, that pre-consultations with key stakeholders have begun, and that formal consultations through the *EBR* process will occur in the late spring and early summer of 2001.

MOE should ensure that its policy review of these matters addresses the need for ecosystem protection and that approaches such as nutrient management planning and protection of groundwater recharge areas are considered. MOE should also address the need for the public to have a voice in environmentally significant decisions, both at the broad policy level and on more local site-by-site decisions. To allow for informed public comment, MOE should provide current information on existing trends and patterns of sludge and septage management in Ontario, as well as current information on environmental impacts.

*There have been recent developments on this issue. For ministry comments, see pages 190-192.*

## Recommendation 3

**The ECO recommends that:**

MOE and OMAFRA ensure that the new legislation and policies for sewage sludge and septage address the need for overall ecosystem protection, as well as protection of groundwater recharge areas.

# Transportation and Land Use Planning for the GTA

## Introduction

The Greater Toronto Area's worsening traffic congestion has become a major frustration for individuals and a drag on the region's economic productivity. But the problem also has direct impacts on the environment and the ecosystem, especially on air quality and land use. In response to congestion, yet more highways, interchanges and other infrastructure are constructed, not only consuming large quantities of land, but also promoting still more urban sprawl. Urban sprawl has been the forerunner to traffic congestion, and the two phenomena have worked together in a vicious cycle to accelerate the paving over of much of the Greater Toronto Area (GTA), including vast acreages of Class 1 agricultural lands and important headwater areas for streams and rivers flowing into Lake Ontario.

Population growth has been particularly rapid in the GTA's suburban regions and, unfortunately, has taken place without the Ministry of Transportation's insisting on coordinated transit planning. Car-dependent commuters created the pressure for a new highway ring to the north, the 407 Highway, which in turn has spurred further low-density development, placing intense development pressures today on the Oak Ridges Moraine and on its forests, groundwater and wildlife habitats.

## The Prognosis

Most experts predict that traffic congestion in the GTA will get a lot worse during the next decade. Demographic trends suggest that the population of the region will grow by another million to about five million people, and that new residents increasingly will settle in the suburban areas, where low-density development dictates that only rudimentary public transit will be feasible. In the past, the traditional "suburbs to downtown" commuting pattern has been relatively well-served by public transit. Increasingly, however, commuters will be traveling from one suburban area to another, relying overwhelmingly on cars, and lengthy commuting times will continue to degrade the quality of life. But the alternative to cars – public transit – is also under pressure in the GTA. GO Transit cannot meet total current demand, which is predicted to double by 2021.

### Vehicles and Air Pollution

The air emissions of the transportation sector in the Greater Toronto Area are hard to ignore. Smog is a growing concern for the GTA, and road vehicles are important sources of the precursor chemicals that help to form smog. According to the Ministry of the Environment, the transportation sector is responsible for an estimated 60 per cent of Ontario's nitrogen oxide (Nox) emissions and over 30 per cent of its volatile organic compound (VOC) emissions. Ground-level ozone peaks are typically higher in Toronto than in Vancouver or Montreal. Carbon monoxide (CO) levels also tend to be higher than elsewhere in Ontario because of vehicle emissions. A 1990 City of Toronto study that looked at air pollutants at "nose level" on a number of city streets found that concentrations of CO and NOx closely followed patterns of hourly traffic volume, suggesting that Toronto itself is the origin of most of its CO and NOx pollution. Transportation emissions also have global environmental impacts since they are major contributers to greenhouse gases, accounting for approximately one-third of Ontario's total emissions.

## What is Being Done: Short-term Actions

Several GTA capital expansion projects are currently under way or committed, including Highway 407 and the construction of the Sheppard subway from Yonge Street to Don Mills Road, as well as certain highway widenings and regional road improvements. However, an August 1999 study based on MTO's data and analysis concludes that these committed expansion projects won't be enough to address the needs of the GTA population in the year 2021. The study concludes that by then a projected 12 per cent increase in road lane-kilometres will be significantly outpaced by a predicted 59 per cent increase in vehicle-kilometres. Also by that time, major corridor deficiencies will be evident throughout the GTA, particularly those corridors in the central area and crossing City of Toronto borders, resulting in significant increases in congestion and travel times.

In a January 2001 news release, MTO indicated that it has spent over $1 billion to improve transportation in Toronto since 1998. Most of this funding ($829 million) was a July 1998 payment toward the Toronto Transit Commission's capital plan, primarily to build the Sheppard subway extension and to help rehabilitate the system and improve safety. GO Transit in the Toronto area also received a $53 million allocation. As well, $134 million of provincial spending went toward rehabilitating and upgrading provincial highways in the Toronto area.

With regard to future plans for funding transportation in the GTA, the Minister of Municipal Affairs and Housing told GTA municipal leaders in September 2000 that transit projects would be eligible for funding from the province's Superbuild program, if municipalities could make a convincing case that such projects were top priorities. However, four months later, in January 2001, the Minister of Transportation stated at a news conference that funding commitments for the GTA had been met, and that there would be no new funding for public transit in Toronto beyond those commitments.

The province also reiterated in March 2001 that it does not intend to share provincial fuel tax revenues with GTA municipalities to fund transportation solutions such as public transit, although this approach is used in British Columbia, Alberta and Quebec. GTA municipalities had been hoping for such support, since their municipal transit services regularly face budget pressures that force them to consider either fare increases or service cuts.

## Long-term Solutions

Explicit agreements on cooperation between levels of government seem out of reach in a climate in which the province is reducing its role and municipalities lack the explicit power to tax gasoline or car drivers to raise money for transit. This is a critical problem for the GTA, since very long lead times are typically needed to build transportation infrastructure, even after all approvals are given and funding is committed. For example, the Sheppard subway construction project was announced by the province in early 1993, and official groundbreaking took place in June 1994. Construction of the 6.4 km line is still under way and scheduled for completion in 2002.

There is broad agreement that improvement and expansion of the regional transit system will be particularly critical to the future of the GTA, not only because of public transit's lower environmental impact, but also because options for road widening are very limited in the built-up portions of the GTA. Various studies and expert bodies have pointed out that the GTA needs a vast array of transit improvements, ranging from integrating the numerous transit systems in the region to establish-

ing transit corridors with separate rights of way, which would allow phased introduction of buses, high occupancy vehicle lanes, and, potentially, streetcars, subways or trains.

Transportation Demand Management (TDM) is also frequently invoked as a way of controlling the related syndromes of sprawl and congestion. TDM is essentially a coordinated effort by governments to reduce car use, especially during rush hours, by encouraging a full range of activities, from telecommuting and flexible work hours through cycling, walking, transit and car-pooling. TDM has great potential in areas like the GTA, where there is little space to add or widen roads, even if money were available. It can be an excellent way to wring the maximum efficiency out of existing infrastructure, and experts project that an aggressive TDM program could significantly reduce the growth in car use in the GTA.

Unfortunately, TDM is languishing in the GTA and elsewhere in Ontario, because it can't work without excellent coordination and cooperation between levels of government, transit bodies and other agencies. MTO and other provincial ministries have provided little or no support for TDM in recent years. The concept is not mentioned even in passing in recent Business Plans of the Ministry of Transportation. Programs encouraging car-pooling are a key element of TDM, and although the Ministry of Transportation used to operate such a program for the public through its Web site, the ministry ended the program in the summer of 2000 without providing notice or explanation to the public. MTO does help its own staff identify car pool partners through an electronic bulletin board, but this gesture cannot begin to address the need for leadership on TDM. Although the Ministry of the Environment established a working group on Transportation Demand Management in 1997 as part of its Anti-Smog Action Plan, the ministry reported that, three years later, there has been no progress on this issue.

Ride-sharing on the roads between cities is a natural extension of urban car-pooling and provides the same environmental benefits, reducing both vehicle emissions and the pressure to expand highways. A number of small companies had been coordinating ride-sharing between Ontario cities. But, again, MTO has no policies or programs in place to encourage such commercial operations. On the contrary, rulings in the summer of 2000 by the Ontario Highway Transport Board have sent strong chilling signals, by effectively shutting down several small companies and fining them thousands of dollars, following complaints by major inter-city bus operators. Passenger safety concerns were also heightened after a serious van accident in July 2000. The *Public Vehicles Act* regulates such operations, but some observers say its language effectively prohibits small commercial operators. One Ontario MPP has asked the Minister of Transportation to amend this section of the Act in order to encourage the concept of ride-sharing, while still regulating passenger safety in small commercial vans. While this type of amendment does appear to have merit, the *Public Vehicles Act* – and the Ministry of Transportation – are not subject to applications for review under the *Environmental Bill of Rights*.

## MTO's Responsibility for Planning

MTO has for many years had the lead provincial role in long-range transportation planning, and according to its 2000/2001 Business Plan, MTO still considers planning to be part of its core business. A recent example includes the ministry's decision on a long-range transportation planning study for Southwestern Ontario, which was posted on the Environmental Registry in November 2000.

## MTO's Long-range Transportation Planning Not Open to the Public

As part of its mandate, MTO regularly carries out long-range planning exercises in which the ministry forecasts regional transportation needs and priorities for a 30-year horizon. This work includes evaluating future travel demands, roadway alternatives and alternative modes of transportation. The ministry also identifies broad corridors for future transportation infrastructure, and considers either using new corridors or expanding existing corridors, guided by environmental and other constraints. This planning phase precedes more focused construction projects, which then become subject to the *Environmental Assessment Act*.

MTO's early planning work clearly has a strong environmental significance, as well as high public interest, and therefore would be highly appropriate information to share with the public through the Environmental Registry. Highways have major environmental impacts, during both their construction and their normal use, and the placement of highway corridors has always been controversial for communities. For example, in recent years, citizens' groups have raised concerns about the construction of Highway 407 across the north of the GTA, the proposed Red Hill Creek expressway in Hamilton, and a proposed new highway between Kitchener and Guelph. It is important that Ontarians be able to discuss potential transportation projects, as well as their alternatives, at the earliest stages of planning, prior to the very focused review of specific construction projects under the *Environmental Assessment Act*.

MTO has repeatedly assured the ECO that the ministry is committed to using the Environmental Registry. For example, in early 2000, MTO reported to the ECO that:

> "Consultation on ministry undertakings will be broad-based involving not only stakeholders but the public, and will be early in the planning process. . . . MTO fully recognizes the important linkages between transportation, land use and the environment. This relationship is incorporated within all of MTO's planning endeavours . . . For proposals subject to the *EBR*, MTO is committed to maximizing the benefits of the tools provided by the legislation to achieve a cost effective way to inform Ontarians and invite feedback . . . MTO continues to make every effort to incorporate the letter and spirit of the *EBR* through all of its core business activities."

However, despite these stated commitments, MTO has not used the Environmental Registry to consult with the public on its long-range transportation planning work. Since April 1995, when MTO became subject to the posting requirements of the *EBR*, the ministry has posted only one proposal on the Registry for a long-range regional planning study. Entitled the Southwestern Ontario Transportation Perspective, this proposal was posted in April 1996, but MTO waited for four and a half years to post a decision on the proposal. The decision notice provided virtually no information: it was a mere two sentences long and did not describe the ministry's next steps. No final reports are available to the public regarding this work, even though MTO's 1999/2000 Business Plan listed among its achievements that a draft report had been completed for this study.

In late 2000, the ECO learned that MTO had made an internal decision not to post on the Registry any other regional long-range planning studies – or "Needs Assessments," as the ministry now calls them. Such Needs Assessments are constantly under way. For example, an Eastern Region study was in progress in 1999/2000 and a Niagara Peninsula study was announced in March 2000.

cont'd

**cont'd**

The ECO encouraged the ministry to reconsider, and to post all such Needs Assessments on the Registry as policy proposals with public comment opportunities. The ministry adopted a compromise approach and committed in June 2001 to posting all future Needs Assessments on the Registry as information notices. The ministry also committed to releasing the findings from all Needs Assessment studies for public review and comment. While this approach will help to update the public on the ministry's decision-making, it does not actively engage the public in that decision-making – an important distinction. For a more detailed explanation of why information postings are weaker than proposal postings under the *EBR*, please see pages 37-39 (Information Notices). It is also not clear whether previously completed Needs Assessments will be published.

MTO does monitor and evaluate regional transportation trends, but the information appears to be intended primarily for internal technical staff, and is not readily accessible to members of the public wanting to comment on transportation planning issues. For example, MTO is a funding partner in a telephone survey that is carried out every five years in the GTA and surrounding regions. The survey is managed by the University of Toronto and assesses household travel patterns. MTO and other funding partners use the data in transportation planning studies. The ministry also carries out periodic congestion surveys on GTA highways and collects traffic counts and vehicle occupancy information. MTO also provides modest funding to other agencies that collect and analyse certain data. For example in 2000, MTO provided $20,000 to the Canadian Urban Transit Association to collect, analyse and publish data on Ontario municipal transit systems for the year 1999. The data include financial information such as revenues, expenditures and service statistics. Under another initiative, the Ministry of Municipal Affairs and Housing is beginning to monitor the performance of municipal transit systems through the Municipal Performance Measurement Program. This program requires municipalities to submit the number of transit trips per person in their service area, and the operating costs per passenger trip.

## Who is responsible for GTA transportation planning?

Despite stated corporate commitments to planning, MTO appears to be refusing to take a leadership role on planning for the GTA. Over the past several years, MTO has failed to articulate the looming GTA transportation problems for Ontario decision-makers or the Ontario public, and has not assigned the issue any kind of priority within MTO Business Plans. Instead, these Business Plans show that MTO's top priority for the past three years has been road safety. MTO's 2000/2001 Business Plan includes only a passing reference to the GTA:

> "To plan for the future and to ensure that Ontario's transportation system meets our needs for economic competitiveness and safety, the ministry will work in partnership with other jurisdictions to develop strategic trade corridors and gateways that address congestion in the GTA and other urban areas."

cont'd

The ECO encouraged the ministry to reconsider, and to post all such Needs Assessments on the Registry as policy proposals with public comment opportunities. The ministry adopted a compromise approach and committed in June 2001 to posting all future Needs Assessments on the Registry as information notices. The ministry also committed to releasing the findings from all Needs Assessment studies for public review and comment. While this approach will help to update the public on the ministry's decision-making, it does not actively engage the public in that decision-making – an important distinction. For a more detailed explanation of why information postings are weaker than proposal postings under the *EBR*, please see pages 37-39 (Information Notices). It is also not clear whether previously completed Needs Assessments will be published.

MTO does monitor and evaluate regional transportation trends, but the information appears to be intended primarily for internal technical staff, and is not readily accessible to members of the public wanting to comment on transportation planning issues. For example, MTO is a funding partner in a telephone survey that is carried out every five years in the GTA and surrounding regions. The survey is managed by the University of Toronto and assesses household travel patterns. MTO and other funding partners use the data in transportation planning studies. The ministry also carries out periodic congestion surveys on GTA highways and collects traffic counts and vehicle occupancy information. MTO also provides modest funding to other agencies that collect and analyse certain data. For example in 2000, MTO provided $20,000 to the Canadian Urban Transit Association to collect, analyse and publish data on Ontario municipal transit systems for the year 1999. The data include financial information such as revenues, expenditures and service statistics. Under another initiative, the Ministry of Municipal Affairs and Housing is beginning to monitor the performance of municipal transit systems through the Municipal Performance Measurement Program. This program requires municipalities to submit the number of transit trips per person in their service area, and the operating costs per passenger trip.

## Who is responsible for GTA transportation planning?

Despite stated corporate commitments to planning, MTO appears to be refusing to take a leadership role on planning for the GTA. Over the past several years, MTO has failed to articulate the looming GTA transportation problems for Ontario decision-makers or the Ontario public, and has not assigned the issue any kind of priority within MTO Business Plans. Instead, these Business Plans show that MTO's top priority for the past three years has been road safety. MTO's 2000/2001 Business Plan includes only a passing reference to the GTA:

> "To plan for the future and to ensure that Ontario's transportation system meets our needs for economic competitiveness and safety, the ministry will work in partnership with other jurisdictions to develop strategic trade corridors and gateways that address congestion in the GTA and other urban areas."

For the last three years, MTO Business Plans have set the ministry only one target relevant to transportation policy and planning: "to ensure that 90 per cent of the population live within 10 kilometres of a major provincial highway corridor." This target is meaningless as a measure of congestion, and completely ignores the crucial role that public transit must play in GTA transportation solutions.

### Transfer of Transportation Planning to the Greater Toronto Services Board

During 1998 and earlier, MTO worked on an internal project called the GTA Transportation Planning Process. But in the summer of 1999, MTO quietly transferred this major responsibility to the newly formed Greater Toronto Services Board (GTSB). The GTSB was established by the Ministry of Municipal Affairs and Housing to assist the 30 municipalities within the GTA to work cooperatively to provide area-wide services and integrated infrastructure.

MMAH and MTO have provided the ECO with conflicting descriptions of how responsibilities are now divided between MTO and the GTSB. MMAH states "that the government did not transfer responsibility for overall GTA transportation planning to the GTSB." MMAH also states that GO Transit "is the only area of transit planning for which the Board has responsibility at the present time." But MTO has informed the ECO that in the GTA, the ministry is responsible for planning and policies related to the provincial highway network, implying that the ministry's responsibilities do not include transit planning or overall planning coordination. MTO has explained to the ECO that "In addition, the Greater Toronto Services Board was given the responsibility for the operation of an overall network planning for transportation planning among the GTSB's constituent municipalities..... Prior to the creation of the GTSB, the Ministry did often act in a co-ordinating role when there were inter-regional initiatives." MTO's recent Business Plans provide another clue that the ministry's mandate seems to have been reduced. MTO's 1999/2000 Business Plan stated that "Our policy interests, however, are broader than highways. We are the province's window to the overall transportation system." The following year, this message had vanished from the ministry's Business Plan. Based on information provided by the ministries, the ECO is unable to determine which agency – if any – is responsible for integrated transportation planning in the GTA.

If the transfer of GTA transportation planning responsibility did take place, then MTO did not inform the public, either by a news release or a notice on the Environmental Registry. This lack of transparency in decision-making is not in keeping with the intent of the *EBR*.

Beyond the poor transparency, the ECO has several other concerns with a transfer of responsibility for GTA transportation to the GTSB. This would effectively transfer a core ministry responsibility with significant environmental implications to an agency that is not prescribed by the *EBR*. This means that Ontarians would lose their legal rights to be informed of and to comment on environmentally significant proposals related to GTA transportation planning. MTO had explicitly assured ECO in late 1998 that "alternative service delivery systems for programs and policies subject to *EBR* are developed in accordance with the requirements of the legislation." The ministry also told the ECO that "MTO ensures that standards in key areas such as the environment and safety remain in effect by maintaining responsibility for policy development and standard setting." Relinquishing responsibility for GTA transportation planning would ignore those commitments.

The Greater Toronto Services Board is governed by the *GTSB Act*, which, in contrast to the *EBR*, provides scant direction on environmental decision-making. The *GTSB Act* merely states that "the Board shall have regard to the diverse cultural, environmental and economic character of communities within the GTA" and "shall have regard to policy statements issued under the *Planning Act*." The *GTSB Act* does set out some public consultation requirements for the Board, but they are more limited than those provided by the *EBR*.

The GTA Transportation Planning Process was transferred from MTO to the GTSB with very limited coordination. MTO did agree to pass its unpublished technical information over to the Board, but there were no other significant interactions or meetings between the agencies. Since then, MTO has had very limited dealings with the GTSB, which has been preparing a Strategic Transportation Plan for the GTA. The GTSB finalized its document, entitled "Removing Roadblocks," in June 2000, but MTO has not provided any response to the plan. The Ministry of Municipal Affairs and Housing, which created the GTSB, had only an extremely minor role in the development of the plan.

## Constraints on the GTSB

A number of resource constraints have made it very difficult for the Board to carry out effectively the huge task of transportation planning for the GTA. The Board operated with a staff complement of four persons during its first year of existence, during which time it was handed this responsibility. These staff included an executive director, a director of research and policy, an office administrator and a secretary. In addition to overseeing the work of transportation planning consultants, their job in 1999 was also to launch the Board's activities across a very broad mandate, including GTA-wide coordination of economic development, tourism, social assistance and social housing; to provide advice and support to Board members on four standing committees and two special committees; and to help a seven-member board reporting to the GTSB to take on operational control of GO Transit beginning in August 1999.

To undertake effective transportation planning for the GTA, active participation of a wide range of stakeholders is required. Most experts assert that massive infrastructure investments are needed, thus dictating the active participation and support of all three levels of government. Indeed, a report prepared for the GTSB in 1999 identified a transportation funding shortfall of $800 million annually. The Greater Toronto Services Board has no funding capacity of its own for this purpose, and is explicitly prohibited from imposing fees or charges, incurring debts, or making investments. Moreover, the Board's membership is composed of 30 municipalities which have widely varying transportation priorities, challenges and long-term goals, and which may find themselves on opposite sides of many issues.

By the beginning of 2001, there was widespread frustration with the jurisdictional impasse on GTA transportation planning. Many observers, from transportation consultants to municipal councillors to Ontario's Premier, commented that the Board is not able to function as an effective coordinating agency under its current legislative mandate. Even the new Chair of the Board, Gordon Chong, used his first public meeting to challenge the province to focus on the GTA, and to provide funds and expertise within six months to address the region's transportation problems – or see the Board disband.

### ECO Comment

Most Ontarians assume that the Ministry of Transportation continues to have the lead responsibility for transportation planning in Ontario. Provincial leadership is clearly needed to address the larger implications of transportation planning decisions for Ontario's environment. Individual municipalities, or even groups of municipalities, cannot adequately deal with transportation impacts region-wide on either air quality or loss of remaining farmlands and natural areas.

However, MTO has not been providing that badly needed leadership, and, especially in the GTA, it does not appear that any agency is in charge of this mandate. The ministry's response to traffic congestion has been to focus on a program of highway expansion, which in fact exacerbates the problems of air pollution and urban sprawl, and at best only delays future intensified traffic congestion. The ministry no longer supports municipal public transit systems, and gives almost no attention to Transportation Demand Management.

Although there are conflicting messages from the ministries, it appears that MTO has, without any announcement or public consultation, shed its responsibility for long-range transportation planning in the GTA, and has handed the role to the GTSB, a new agency which, virtually all observers agree, is ill-equipped to meet this responsibility, lacking both an explicit mandate and fund-raising powers.

MTO's long-range transportation planning for other parts of the province is carried out through Needs Assessments. MTO has committed (in June 2001) to notifying the public about these Needs Assessments by posting information notices on the Environmental Registry. But this approach is not enough to allow real public involvement in the ministry's decision-making, as contemplated under the *EBR*. The ECO encourages MTO to solicit public input on its Needs Assessments by posting regular proposal notices with public comment periods.

The Ministry of Transportation needs to consider seriously how it will begin to meet its obligations to environmental protection and to public consultation under the *Environmental Bill of Rights*.

*For ministry comments, see pages 192-194.*

## Recommendation 4

**The ECO recommends that:**

- MTO adopt a leadership role on long-range integrated transportation planning throughout the province, and especially for the GTA region.
- MTO open its long-term needs assessment process to greater public consultation.

# Air Issues Update

## Air Quality: Taking an Ecosystem View

According to a government-sponsored poll, air pollution remained the top environmental concern for Ontarians in the year 2000, even in the face of recurring media headlines about Ontario's water quality problems. Air pollution is a very complex issue, and specialists tend to focus either on smog episodes, greenhouse gas emissions, acidic precipitation or emissions of persistent toxic contaminants. But the public takes a less scientific and more practical view of air quality, and shows concern about the overall impact of poor air quality on people and our ecosystems, and about the implications for future life on this planet. This view has a lot of validity. Policymakers need to learn to apply this holistic approach at the same time as they struggle with the enormous complexity of today's air quality concerns.

Air quality regulators are faced with an ever-accelerating growth of new products and processes, all contributing to air emissions. To complicate matters, the impacts of pollutants can vary greatly in scale and effect. For example, smog precursors and acid emissions from a coal-fired power plant may

### Ecosystem Impacts of Air Emissions: Some Examples

Many of the ecosystem impacts caused by air emissions are interrelated. For example:

**Climate change, acid rain and ultraviolet radiation.**
Ontario's lakes are susceptible to multiple atmospheric impacts. Three atmospheric stresses – climate change, acid precipitation and excessive ultraviolet radiation – have interlinking effects on boreal lakes. Climate change and acid precipitation in this region have lowered the levels of dissolved organic carbon in water bodies, allowing more ultraviolet radiation to penetrate water to greater depths. Increased ultraviolet radiation can damage deep-water organisms and disrupt these ecosystems. There are nearly 700,000 lakes in eastern Canada, many of which are vulnerable to this multiple threat.

**Elevated mercury levels in otters in Ontario.**
Otters are at the top of aquatic food chains and consequently consume concentrated levels of contaminants. MOE researchers have determined that in certain locations, high mercury levels may be contributing to reduced life spans of otters. Fish consumption advisories for humans have been issued for lakes near Algonquin Park due to mercury, which is believed to be predominately atmospheric in origin. Otters, which eat large quantities of fish, accumulate significant levels of mercury, which is known to impair neurological health and immune function and reduce cold temperature tolerance.

**Drought and the re-acidification of lakes.**
Researchers at MOE's Dorset Environmental Science Centre have observed a potential link between climate change and the re-acidification of lakes. Droughts typically occur in Ontario in the years following an El Niño cycle. The El Niño effect has become more frequent and pronounced, possibly as a consequence of greenhouse gas-linked climate change. During droughts, oxidized sulphur compounds build up in soils. Then, in following wetter years, these acidifying agents are flushed back into aquatic habitats, even though acidic conditions had previously been stable or improving.

### ECO Comment

Most Ontarians assume that the Ministry of Transportation continues to have the lead responsibility for transportation planning in Ontario. Provincial leadership is clearly needed to address the larger implications of transportation planning decisions for Ontario's environment. Individual municipalities, or even groups of municipalities, cannot adequately deal with transportation impacts region-wide on either air quality or loss of remaining farmlands and natural areas.

However, MTO has not been providing that badly needed leadership, and, especially in the GTA, it does not appear that any agency is in charge of this mandate. The ministry's response to traffic congestion has been to focus on a program of highway expansion, which in fact exacerbates the problems of air pollution and urban sprawl, and at best only delays future intensified traffic congestion. The ministry no longer supports municipal public transit systems, and gives almost no attention to Transportation Demand Management.

Although there are conflicting messages from the ministries, it appears that MTO has, without any announcement or public consultation, shed its responsibility for long-range transportation planning in the GTA, and has handed the role to the GTSB, a new agency which, virtually all observers agree, is ill-equipped to meet this responsibility, lacking both an explicit mandate and fund-raising powers.

MTO's long-range transportation planning for other parts of the province is carried out through Needs Assessments. MTO has committed (in June 2001) to notifying the public about these Needs Assessments by posting information notices on the Environmental Registry. But this approach is not enough to allow real public involvement in the ministry's decision-making, as contemplated under the *EBR*. The ECO encourages MTO to solicit public input on its Needs Assessments by posting regular proposal notices with public comment periods.

The Ministry of Transportation needs to consider seriously how it will begin to meet its obligations to environmental protection and to public consultation under the *Environmental Bill of Rights*.

*For ministry comments, see pages 192-194.*

## Recommendation 4

**The ECO recommends that:**

- MTO adopt a leadership role on long-range integrated transportation planning throughout the province, and especially for the GTA region.
- MTO open its long-term needs assessment process to greater public consultation.

# Air Issues Update

## Air Quality: Taking an Ecosystem View

According to a government-sponsored poll, air pollution remained the top environmental concern for Ontarians in the year 2000, even in the face of recurring media headlines about Ontario's water quality problems. Air pollution is a very complex issue, and specialists tend to focus either on smog episodes, greenhouse gas emissions, acidic precipitation or emissions of persistent toxic contaminants. But the public takes a less scientific and more practical view of air quality, and shows concern about the overall impact of poor air quality on people and our ecosystems, and about the implications for future life on this planet. This view has a lot of validity. Policymakers need to learn to apply this holistic approach at the same time as they struggle with the enormous complexity of today's air quality concerns.

Air quality regulators are faced with an ever-accelerating growth of new products and processes, all contributing to air emissions. To complicate matters, the impacts of pollutants can vary greatly in scale and effect. For example, smog precursors and acid emissions from a coal-fired power plant may

### Ecosystem Impacts of Air Emissions: Some Examples

Many of the ecosystem impacts caused by air emissions are interrelated. For example:

**Climate change, acid rain and ultraviolet radiation.**
Ontario's lakes are susceptible to multiple atmospheric impacts. Three atmospheric stresses – climate change, acid precipitation and excessive ultraviolet radiation – have interlinking effects on boreal lakes. Climate change and acid precipitation in this region have lowered the levels of dissolved organic carbon in water bodies, allowing more ultraviolet radiation to penetrate water to greater depths. Increased ultraviolet radiation can damage deep-water organisms and disrupt these ecosystems. There are nearly 700,000 lakes in eastern Canada, many of which are vulnerable to this multiple threat.

**Elevated mercury levels in otters in Ontario.**
Otters are at the top of aquatic food chains and consequently consume concentrated levels of contaminants. MOE researchers have determined that in certain locations, high mercury levels may be contributing to reduced life spans of otters. Fish consumption advisories for humans have been issued for lakes near Algonquin Park due to mercury, which is believed to be predominately atmospheric in origin. Otters, which eat large quantities of fish, accumulate significant levels of mercury, which is known to impair neurological health and immune function and reduce cold temperature tolerance.

**Drought and the re-acidification of lakes.**
Researchers at MOE's Dorset Environmental Science Centre have observed a potential link between climate change and the re-acidification of lakes. Droughts typically occur in Ontario in the years following an El Niño cycle. The El Niño effect has become more frequent and pronounced, possibly as a consequence of greenhouse gas-linked climate change. During droughts, oxidized sulphur compounds build up in soils. Then, in following wetter years, these acidifying agents are flushed back into aquatic habitats, even though acidic conditions had previously been stable or improving.

impact local air quality, but they also contribute pollution to regional airsheds and cause seasonal problems affecting wide swaths of a continent. The environmental impacts of greenhouse gases and ozone-depleting substances are truly global, long term, and entirely unrelated to their point of origin. Moreover, a single smokestack may produce emissions that contribute to the full range of impacts, from local to global. To further complicate matters, air pollutants readily cross political boundaries.

Regulatory frameworks designed 30-odd years ago to address problems like gross emissions of black smoke are still in use, albeit with important updates and complex amendments. But these frameworks were not designed to cope with environmental concerns as we understand them today. The regulatory system, the regulated community and the Ministry of the Environment are all showing signs of strain under the many new demands. Public consultation on air quality issues has also become more difficult, with few public interest groups or members of the general public able to devote time and resources to the many complex technical issues.

Air quality issues are a high priority for MOE, and the regulation of air quality is in considerable flux in Ontario. During this reporting period, MOE proposed a number of significant new approaches, including incorporating newer air dispersion models into legislation, establishing a new consultation process for applying new air quality standards to emission sources, an expansion of the Drive Clean Program, and a discussion paper on a proposed emission cap and trade system. The ECO will review these initiatives once decisions on them are made by MOE. In the following pages, the ECO provides updates on a number of other air quality issues, including several which have been either the subject of ministry decisions or applications for review or investigation under the *EBR* during this reporting year.

## Control of Ontario Transportation Emissions

The transportation sector is a major source of air pollution in Ontario, responsible for an estimated 60 per cent of nitrogen oxide ($NO_x$) emissions and over 30 per cent of volatile organic compound (VOC) emissions. But MOE and the Ministry of Transportation are putting little emphasis on curbing vehicle use, and instead are attempting to improve tailpipe emissions of vehicles through the Drive Clean program. ( The status of Transportation Demand Management in Ontario is described on page 59.)

## Drive Clean

Drive Clean was launched by MOE in April 1999, with a stated goal of reducing emissions of smog-causing pollutants from southern Ontario vehicles by up to 22 per cent annually. The program was established with the support of a wide range of interests, including vehicle manufacturers, motorist associations and environmental organizations. Key features include mandatory emissions testing for vehicles every two years, and a requirement that failing vehicles undergo repairs to their emission control systems, up to a $200 repair cost limit. Drive Clean is complemented by the ministry's Smog Patrol, an on-road program that targets grossly polluting vehicles and issues some 500 tickets annually. Drive Clean is clearly very important to MOE, and once fully rolled out, will directly affect over four million Ontario vehicles. The program features prominently on the home page of the ministry's Web site, and is also a core initiative of the ministry's Business Plan 2000/2001. The ministry predicts

significant emission reductions from the program, amounting to about 10 per cent of Ontario's total targeted reductions in smog-producing pollutants over the next decade.

In this reporting year, the ECO received an application under the *EBR* requesting a review of the Drive Clean program. The applicants raised a long list of detailed concerns, questioning both the effectiveness and the transparency of the program. They were concerned that the benefits of the Drive Clean program may be outweighed by its environmental costs – such as the extra trips people take to get their cars tested. MOE denied the application for review, and summarily dismissed the detailed concerns raised by the applicants. The ECO found that the applicants had raised valid concerns about the lack of transparency in decision-making on the program. The applicants should have been provided with better information and a more detailed explanation.

(For a full description of this application, see pages 186-187 of the Supplement to this annual report.)

However, several weeks after denying this application for review, MOE announced a major consultation on enhancing and expanding the Drive Clean program, and posted the proposal on the Environmental Registry for a 60-day public comment period (from April 9 to June 8, 2001). The ministry presented a number of options for expanding and strengthening the program, and provided a brief background context for the public to consider. The ECO will review MOE's decision on this proposal once it is posted on the Registry.

In this reporting year, an *EBR* application for review was also submitted to the ECO on the need for municipal by-laws to control excessive idling of vehicles. The applicants believe that a program to reduce vehicle idling could be a much more effective form of pollution control than the Drive Clean program. These by-laws exist in several Ontario municipalities. However, municipalities lack express legal power to enact the by-laws and, consequently, are reluctant to enforce them. ( See page 209 of the Supplement for a full description.)

Drive Clean has the potential to become an important tool for reducing air pollution by helping to get grossly polluting vehicles off the road. The program also contributes to an increased public awareness of how vehicle emissions contribute to air pollution. But the program needs to become more transparent. The ministry should give the public full access to the underlying assumptions that are being used to predict the effectiveness of the Drive Clean program. Periodic technical reviews of the program's effectiveness should also be available for public scrutiny and comment. This information is a necessary prerequisite for truly informed public comment and good environmental decision-making.

## Control of Industrial Emissions

Ontario is home to a large, diversified manufacturing sector, and air emissions from industry are significant contributors to Ontario's air quality problems. On January 24, 2000, the Minister of the Environment announced a "new strategic attack on air pollution," focused on industrial, commercial, institutional and municipal sectors. The first component would be mandatory tracking and reporting of all harmful air emissions by industrial and commercial emitters. The second component would be tougher limits on total annual emissions of $NO_x$ and $SO_2$, accompanied by an emission

trading system. Both components would be established first for the electricity sector, then expanded to other sectors.

MOE took this approach because it has concluded that the existing voluntary approach was not adequate. Monitoring and reporting of emissions is a necessary prerequisite to controlling those emissions. Without accurate information on Ontario's air pollution sources (i.e., how much is being emitted and by what sectors), it is not possible to identify the most effective reduction strategies, nor can the ministry gauge progress over time. MOE says the information will help the ministry set and enforce air emission limits, and will support its proposed emission trading system. The ministry says that this strategy will motivate companies to reduce their emissions as a result of public pressure and because of the cost of purchasing emission credits.

A monitoring and reporting regulation for the electricity sector took effect in May 2000, but as described on pages 107-109 of this annual report, it was not implemented as planned. An all-sector monitoring and reporting regulation took effect in May 2001, and will be reviewed by the ECO for the 2001/2002 annual report. Under this regulation, it will be the responsibility of individual facilities to make their emissions data available to the public, and to answer questions. Many stakeholders have expressed disappointment that MOE is not proposing to compile, analyse or publish the data for the public.

Tougher limits on total annual emissions of $NO_x$ and $SO_2$ were originally proposed to apply to electricity generators by January 1, 2001, and to all other major emitters by January 1, 2003. These proposals have been delayed, and the design of the trading system is still under discussion. The electricity sector proposals are discussed below.

MOE can also control air emissions from industrial facilities by reviewing the certificates of approval that are issued to each facility. But Cs of A generally do not have expiry dates or renewal requirements. The Provincial Auditor examined this issue and reported in November 2000 that MOE "did not have an adequate system in place to review the terms and conditions of the existing certificates of approval to ensure they met current environmental standards." MOE agreed with the Provincial Auditor that this system needs to be improved, and said that the ministry is fundamentally changing the way Cs of A are issued and amended. But the ministry has not indicated what priority it has placed on reviewing and updating Cs of A for air emissions. During this reporting period, applications were submitted under the *EBR* for review of the emission limits in air certificates of approval for two major waste incinerators. In one case, MOE decided not to update the C of A.

## Control of Electricity Sector Emissions

Most of the air pollution created by electricity generation in Ontario is produced by the six fossil-fuel-fired generating stations operated by Ontario Power Generation (OPG). Production from these plants has more than doubled since 1995. According to MOE, in 1999 these six stations contributed the following proportion of total emissions created in Ontario:

- 15 per cent of $NO_x$
- 24 per cent of $SO_2$
- 14 per cent of greenhouse gases (in $CO_2$ equivalents)
- 23 per cent of mercury.

Currently OPG is subject to regulatory limits set in 1994 on emissions of $SO_2$ and a combined total of $SO_2$ and $NO_x$. OPG made voluntary commitments to limit total emissions of $NO_x$ and greenhouse gases by 2000, but exceeded its voluntary limits by 32 per cent and 42 per cent respectively. There are no limits on the emissions of any other air pollutants from this sector.

The Market Design Committee established by the province to provide advice on the opening of the electricity sector, as well as the ECO and applicants requesting reviews under the *EBR*, have all recommended that MOE control emissions of other contaminants and greenhouse gases, because there is a real possibility that these plants will be used longer and at a higher capacity once the sector is opened to competition. MOE, however, has proposed controlling only $SO_2$ and $NO_x$ from this sector. Efforts to develop Canada-wide Standards (CWS) for mercury from the electricity generation sector "have been complicated and progress has been delayed," and MOE now predicts they will be finalized by the fall of 2002.

In March 2001 the ministry released a new proposal for emission limits and a discussion paper on the trading system for further public consultation. The new proposed limits would apply to OPG's fossil-fueled plants as soon as the regulation is finalized, and the limits would be shared with other electricity generators beginning in 2004. The proposal would lower these limits again in 2007. MOE also announced its proposals to require the Lakeview Generating Station to cease burning coal by April 2005, and to lift its "moratorium" on the sale of coal-fired electricity plants. Despite ministry announcements throughout 2000 and 2001 that it has imposed strict new limits on air emissions from the electricity sector, the proposed limits had not been finalized as of May 2001, and the effect of the proposals on air quality in Ontario is still uncertain. The ECO will review these initiatives after final decisions are posted. MOE says that the emission cap and trade system will be expanded to other sectors in the future.

### Standard-Setting

In the fall of 1996, MOE initiated a new approach to setting standards for air contaminants and other media. The ministry proposed to adopt standards from other jurisdictions as much as possible, and to encourage joint development of standards with other regulatory agencies, in order "to deliver an increased number of scientifically sound standards in a cost effective manner." (The ECO reviewed this approach in its 1999/2000 annual report, on pages 74-79.)

In March 2001, MOE posted two new policy proposals related to standard-setting, each with a generous public comment period. The first discussion paper described a proposed risk management framework for the air standard-setting process. The ECO had recommended that MOE consult the public on this issue, and commends the ministry for soliciting public input. MOE's second proposal focused on updating mathematical air dispersion models used to calculate and predict the potential air impacts of facilities for compliance purposes. The ECO will review these initiatives once the decisions are posted.

In the fall of 2000, MOE adopted the Canada-wide Standards for Particulate Matter and Ozone. But the federal-provincial negotiations leading up to this adoption resulted in a special clause by which MOE nominally ratified the new standards, but effectively committed only to its existing Anti-Smog Action Plan. Even though CWS are supposed to include timeframes for meeting the target, it is not

clear how the progress or effectiveness of the Anti-Smog Action Plan will be tracked through the Canada-wide Standards agreement. (More detail on this decision is provided on pages 99-100.) In this reporting year, MOE also adopted the Canada-wide Standard for Mercury, for incinerators and base metal smelters. (More detail on this decision is provided on pages 69-72 of the Supplement.)

On March 20, 2001, MOE also posted decisions on air quality standards for 18 substances, such as chloroform, ethyl benzene, hydrogen chloride and toluene. The decisions set new ambient air quality criteria for a number of these substances, and also established 11 interim point of impingement standards, to be in effect pending the results of consultations on a number of related policy proposals. Also on March 20, 2001, MOE posted a decision adopting the National Emission Guideline for Commercial/Industrial Boilers and Heaters. The ECO will review these decisions in the next annual report.

## Monitoring and Reporting on Progress

**Ontario's Anti-Smog Action Plan – Progress Report, August 2000**

In its 1999/2000 annual report, the ECO recommended that MOE report progress on its Anti-Smog Action Plan (ASAP), including an up-to-date tally of achieved emission reductions and a description of new and emerging developments. In August 2000, MOE produced a progress report, but it did not provide updates on a number of important issues. As well, the progress report did not clearly compare actual smog reduction achievements to stated targets.

The ASAP progress report describes some actual emission reductions and activities likely to lead to reductions, but many actions are presented without a clear quantifiable relation to the province's smog reduction goals. The report also tends to focus heavily on commitments to review, analyse, assess, investigate and study rather than on actions to prevent smog-causing emissions. The report itemizes emission reductions in a confusing way: some as an absolute quantity, some as quantity per year, and others simply as a percentage. The report acknowledges that "calculating accurate emission reductions is proving complex . . . Further progress reports will need to provide a comprehensive science-based analysis of emissions and emission reductions."

The public interest group Pollution Probe also criticized the ASAP progress report for failing to factor in the growth in emissions since 1990 due to overall economic growth, and for double-counting one set of reductions.

The ASAP progress report did confirm that major reductions in $NO_x$ expected from Ontario's coal-fired power plants never materialized. In fact, nitrogen oxide emissions from Ontario Power Generation rose to 55.8 kilotonnes (kT) in 1998 from 50 kT in 1990. ASAP had been formulated on the assumption that OPG was to reduce its $NO_x$ emissions to 38 kilotonnes in the year 2000 and beyond.

**An End to MOE's Acid Rain Deposition Monitoring**

On April 1, 2000, MOE decided to shut down its network of acid deposition monitoring stations as a cost-saving measure. (For more information on this decision, see page 35 of this report. )

**Annual Air Quality Reports**

MOE produces very good annual air quality reports. For example, the 1997 report lists air quality statistics by location, for specific contaminants, over time and measured against provincial criteria. The report's well-organized format, language and graphics create a highly accessible approach to what is an often complex subject.

While this series of reports is useful, MOE is taking longer and longer to publish them. The most recent report, covering the year 1998, was published in spring of 2001, 28 months after the close of the reporting year. The release of air quality reports has scarcely been publicized. There appears to have been no MOE media releases dedicated to publicizing the availability of the latest reports.

Publishing – and publicizing – this type of comprehensive air quality report on a more timely basis would help the public gauge progress in meeting air quality objectives. The public should learn promptly about changing trends in either air quality or air emissions, such as the increased reliance on coal-fired power plants by OPG. There is no other source that Ontarians can turn to for this type of comprehensive provincial air quality information.

The ministry's Business Plan 2000/2001 makes no specific commitment to publishing air quality reports promptly, and provides only a reference to "Continued monitoring and ensuring publicly accessible information on air quality." MOE had assured the ECO that the 1999 air quality report would be published by spring 2001.

## Air Quality Ontario Web site

The Air Quality Ontario Web site was launched on April 27, 2000, by MOE. While this Web site serves as a helpful "real-time" information source in addition to the air quality report series, it should not be regarded as a substitute for the series. Its depth of information is much less than that of the annual air quality report series.

MOE's Air Quality Ontario Web site provides only limited information on air quality conditions, for selected locations in Ontario, and only for the current two-week time period. In order to construct air quality trends, an interested member of the public would need to harvest the data regularly over an extended period of time. Previously, the MOE's central Web site (www.ene.gov.on.ca) provided a full year's worth of air quality data on a day-to-day basis, for various locations.

In January 2001, MOE assured the ECO that more extensive historical information would appear on MOE's central Web site in time for the 2001 smog season. MOE also indicated that it has always been the ministry's intention to develop the Air Quality Ontario Web site in stages. As of May 1, 2001, the ECO observed no improvement in historical information on either the ministry's central site (www.ene.gov.on.ca) or the site dedicated to air quality (www.airqualityontario.com).

### Conclusions

While the regulatory challenges are significant, the opportunities for air quality improvements in Ontario are also large. Much of the needed regulatory authority to deal with air pollution resides at the provincial level. The need for investment in clean air is comparable to the need for investment in areas like education or health. It will require a big-picture, long-term strategy, a strong, sustained effort, and a commitment to follow through. The costs of delays will include continued regulatory uncertainty for Ontario industries, lost opportunities to market Ontario-made solutions, and continued deterioration of ecosystems.

As a start, the ECO sees a need for MOE's Drive Clean program to become more transparent, with full public access to the underlying assumptions and periodic technical audits that are used to predict its effectiveness. MOE should also provide progress reports on its smog reduction efforts that are timely, which factor in emission increases due to economic growth, and which use clear, consistent methods to quantify emission reductions. As well, MOE should commit to publishing annual Ontario air quality reports on a more timely basis.

*For ministry comments, see pages 194-195.*

## Recommendation 5

**The ECO recommends that:**

MOE provide timely updates on its smog reduction efforts, taking into account emission increases due to economic growth, and using clear, consistent methods to quantify emission reductions.

# Compliance and Enforcement at MOE

### Introduction

Ontario has some of the best environmental legislation in the world. Indeed, some Ontario laws and policies, particularly those developed by the Ministry of the Environment, have been studied and adapted by lawyers and policymakers in other jurisdictions for decades.

Legislation and regulations are important. However, they are effective only when companies and residents comply with them – and if ministries enforce them when they are contravened. Compliance with a particular Act or regulation is usually said to be achieved when a large portion of companies and residents subject to its requirements adhere to it.

Ontario residents want to be assured that our environmental laws are being followed by industries, municipalities and others who discharge pollutants. Fair, firm and consistent enforcement ensures that good environmental performers are recognized for their efforts and poor performers are penal-

### Conclusions

While the regulatory challenges are significant, the opportunities for air quality improvements in Ontario are also large. Much of the needed regulatory authority to deal with air pollution resides at the provincial level. The need for investment in clean air is comparable to the need for investment in areas like education or health. It will require a big-picture, long-term strategy, a strong, sustained effort, and a commitment to follow through. The costs of delays will include continued regulatory uncertainty for Ontario industries, lost opportunities to market Ontario-made solutions, and continued deterioration of ecosystems.

As a start, the ECO sees a need for MOE's Drive Clean program to become more transparent, with full public access to the underlying assumptions and periodic technical audits that are used to predict its effectiveness. MOE should also provide progress reports on its smog reduction efforts that are timely, which factor in emission increases due to economic growth, and which use clear, consistent methods to quantify emission reductions. As well, MOE should commit to publishing annual Ontario air quality reports on a more timely basis.

*For ministry comments, see pages 194-195.*

## Recommendation 5

**The ECO recommends that:**

MOE provide timely updates on its smog reduction efforts, taking into account emission increases due to economic growth, and using clear, consistent methods to quantify emission reductions.

# Compliance and Enforcement at MOE

### Introduction

Ontario has some of the best environmental legislation in the world. Indeed, some Ontario laws and policies, particularly those developed by the Ministry of the Environment, have been studied and adapted by lawyers and policymakers in other jurisdictions for decades.

Legislation and regulations are important. However, they are effective only when companies and residents comply with them – and if ministries enforce them when they are contravened. Compliance with a particular Act or regulation is usually said to be achieved when a large portion of companies and residents subject to its requirements adhere to it.

Ontario residents want to be assured that our environmental laws are being followed by industries, municipalities and others who discharge pollutants. Fair, firm and consistent enforcement ensures that good environmental performers are recognized for their efforts and poor performers are penal-

ized. Moreover, firm enforcement ensures that ecosystems are protected and human health is safeguarded.

Some of the rights contained in the *EBR* were created to promote greater transparency and accountability in the enforcement process, and to encourage ministries to implement compliance policies that protect ecosystems and natural resources. For example, the Ontario government enacted the application for investigation provisions of the *EBR* so that the public could request that certain ministries investigate situations involving suspected non-compliance with Ontario's environmental laws. Moreover, the office of the Environmental Commissioner of Ontario was established in 1994 to ensure that the Legislature and the public are provided with an independent assessment of how well the ministries are administering Ontario's environmental laws, including compliance functions.

## Scope of this Review

Evidence collected by the ECO suggests that enforcement and compliance activities in several ministries remain uneven across the province and contravenors often are not brought to justice in cases where firm action appears warranted. In the text and charts below, we have summarized some of the cases that were reviewed by the ECO. Since many of the most troubling cases arose in relation to MOE files, the Commissioner directed staff to undertake a review of MOE's approach to compliance.

## How MOE Administers its Environmental Laws

MOE administers four key Acts – the *Environmental Protection Act (EPA)*, the *Ontario Water Resources Act (OWRA)*, the *Pesticides Act*, and the *Environmental Assessment Act* – and more than 90 regulations established under those Acts. The goals of this regulatory regime are aimed at enabling the ministry to protect the environment, prevent pollution, control activities that generate or emit contaminants, and punish those who do not follow Ontario's environmental laws. These statutes provide a range of tools that can be employed by ministry staff to promote compliance and enforce laws. To provide staff with guidance on how to use these tools and how to decide when to prosecute a contravenor, MOE has developed a series of policies and procedures. The most important MOE policy is probably the ministry's Compliance Guideline, which was first developed in the mid-1980s when the Investigation and Enforcement Branch was created. (See "MOE's Approach to Compliance," below.)

## Policy Developments on Compliance Between 1995 and 1999

MOE's Compliance Guideline was last formally revised in June 1995. Under this guideline, MOE uses both abatement and enforcement to ensure compliance with the various environmental laws within its mandate. When an infraction occurs under an MOE Act or one of its regulations, MOE has a range of enforcement options.

At present, MOE employs approximately 30 full-time, permanent investigators and hundreds of provincial officers and field staff, who inspect facilities and undertake abatement activities. (This excludes staff who are part of the SWAT Initiative described below.) The number of Investigation and Enforcement staff at MOE was reduced from 97 in 1995 to 87 in 1999. This led to a sharp decrease in ministry-initiated inspections between 1996 and 2000. A December 2000 report released by the Provincial Auditor found that between 1996 and 2000, MOE decreased ministry-initiated inspections by 34 per cent. This corresponded with a 25 per cent reduction in Operations staff responsible for

## MOE's Approach to Compliance

MOE's Compliance Guideline was last revised in June 1995. This document was one of the first policies posted for comment on the Environmental Registry after the enactment of the *EBR*. Under this guideline, MOE uses both abatement and enforcement to ensure compliance with the various environmental laws within its mandate.

Abatement refers to measures that are taken to correct contravention of environmental legislation through activities such as pollution prevention programs and compliance education. Enforcement measures are more formal and involve investigation by an independent branch of MOE, with the possible result a criminal charge and conviction. Abatement measures can be directed at violations, but may also be used in a proactive manner to prevent future violations. It should be noted that MOE also makes use of certificates of approval and preventative measure orders to prevent pollution at early stages.

MOE finds out about non-compliance with ministry legislation and regulations through routine inspections, and when responding to spills, complaints and applications for investigations and reviews under the *EBR*. The guideline states that where there is an emergency or a situation that poses an immediate danger to human life, health or property, MOE should take immediate action, such as issuing a stop order if voluntary abatement does not occur and requiring the implementation of an abatement program. For all other situations of non-compliance, the ministry makes a determination as to whether voluntary abatement or mandatory measures are warranted.

According to the 1995 guideline document, MOE may require mandatory compliance in accordance with a list of criteria, including situations where non-compliance poses a significant risk or will have an adverse effect on humans, plants, animals, property or the environment; where there is an unsatisfactory compliance record; where the act of non-compliance appears to have been deliberate or to have resulted from negligence; or where previous voluntary abatement has not resulted in progress toward compliance. However, even if some of these mandatory requirements exist, voluntary abatement measures may be used, although reasons for this choice of abatement must be documented.

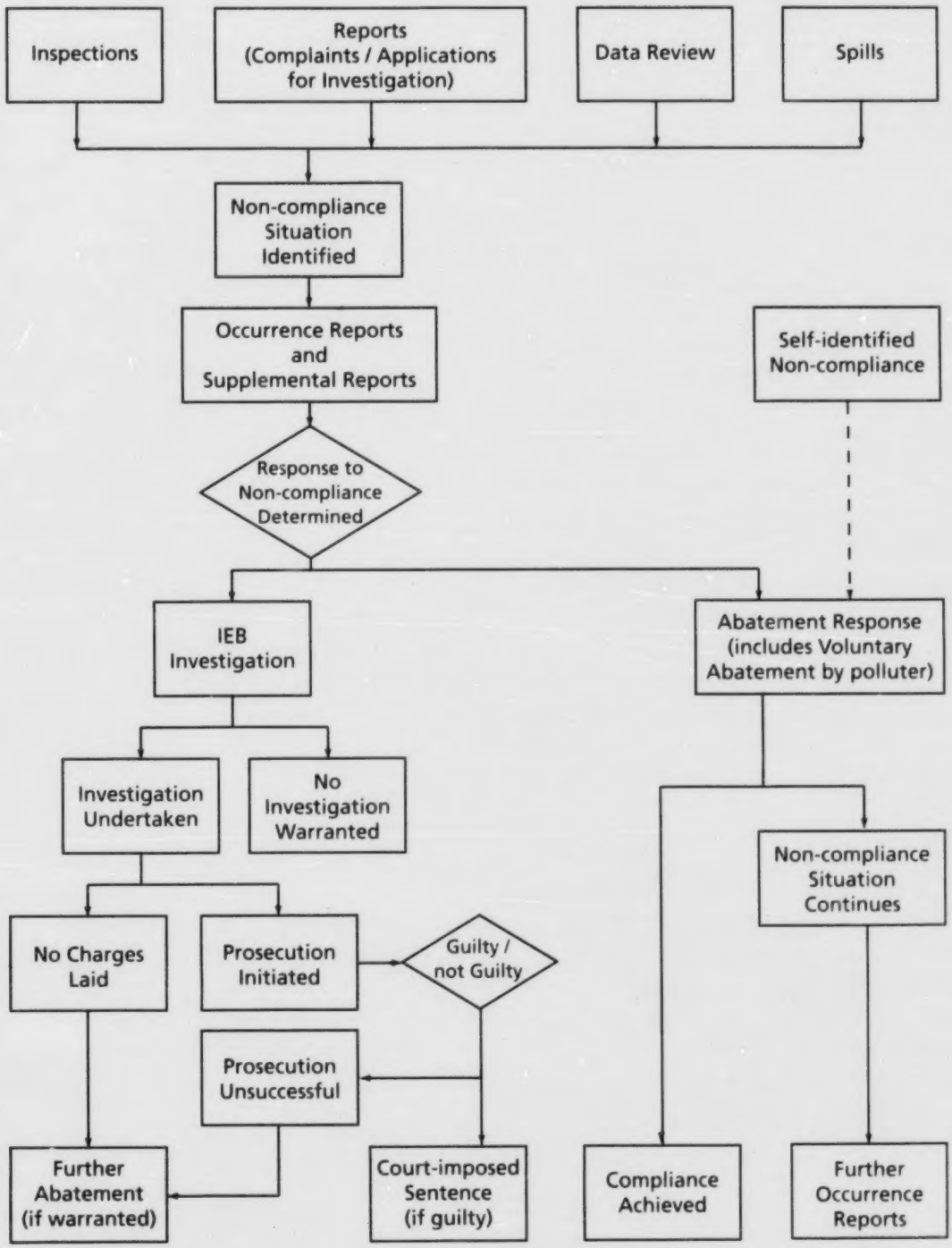
Investigations and inspections are carried out by Provincial Officers and special investigators who are ministry staff designated by the minister, under statute, to enforce the Acts and associated regulations. These officials evaluate the nature and extent and the adverse effects related to non-compliance and determine whether reasonable and probable grounds exist to recommend proceeding with prosecutions and other compliance strategies. Their findings are then written up in an occurrence report. The vast majority of inspectors and abatement officials at MOE work for the Operations Division, the largest division of MOE.

When an infraction occurs under an MOE Act or one of its regulations, MOE has a range of enforcement options. In emergency situations involving the release of specified toxic substances, officers may issue a provincial officer's order to prevent, reduce or remedy damage to the environment. Where mandatory abatement measures are deemed necessary, MOE issues a "control document," an order or report authorized by the appropriate section of the appropriate statute. If there is a situation of non-compliance where an instrument, such as a certificate of approval, is already in place, mandatory abatement can be achieved by amending the existing instrument to impose more stringent conditions, enforcing the current conditions, or suspending or revoking the instrument. If a control document or instrument does not achieve compliance, the case is forwarded to MOE's Investigations and Enforcement Branch (IEB), which decides if an investigation is warranted. If no investigation is warranted, this conclusion is documented in the occurrence report. If an investigation is undertaken, the IEB may draft a Crown brief to support the laying of charges.

The Ministry of the Attorney General has responsibility for all prosecutorial actions and litigation work relating to MOE's mandate. The ultimate decision on whether to proceed with prosecution of the charges rests with the Legal Services Branch of the Attorney General at MOE.

The courts often make the final decisions regarding prosecutions, injunction applications and civil suits under the *EPA*, the *OWRA* and the *Pesticides Act*, including the penalty to impose or the remedy to order.

**MOE's Approach to Compliance**
(as of Fall 2000)



inspections and abatement work during the same period. In addition, MOE also cut the number of staff and resources available to MOE's Legal Services Branch and at MOE's Laboratory Services Branch. As noted below, these branches also play important roles in MOE's enforcement and compliance activities.

Further proposed amendments to the Compliance Guideline were posted on the Environmental Registry in July 1997 for a comment period of 45 days. The proposed amendments to the guideline were intended to provide clarification and guidance to MOE staff on the allocation of environmental liability to responsible parties when issuing clean-up orders. At the time, MOE indicated that this was interim guidance, pending further work by the ministry's Environmental Liability Working Group.

While the Compliance Guideline provides general direction to MOE staff on addressing occurrences that adversely affect the environment, day-to-day work priorities are often established using a range of management tools, such as annual workplans that set out the targets for inspections. Since late 1997, MOE's Operational Delivery Strategies have guided staff as to where financial and staff resources should be focused. The lengthy Delivery Strategies include extensive and complex policy initiatives covering all aspects of MOE's operations. Developed between 1996 and 1998, the Delivery Strategies provide the following types of information to staff:

- Guidance on how managers and staff should set program priorities for work plans, inspection work and program management.
- Explanations as to how MOE staff should handle gaps and lack of clarity in MOE's legislative framework and internal guidance and policy documents.
- A list of categories of pollution incidents to which staff are not supposed to respond.

For each operational program area, a Delivery Strategy sets out a program description, the regulatory framework, compulsory activities, program priorities, how to determine Operations Division involvement, and implementation considerations. The Delivery Strategies were not posted for public comment on the Registry and are not available for reference by the public.

Complementing the Delivery Strategies are the Procedures for Responding to Pollution Incident Reports (PRPIR), developed in 1997. These are explicit guidelines developed to aid MOE staff in deciding which environmental problems will receive a response from MOE, and which will be referred elsewhere. These guidelines define four levels of priority according to the extent of an incident's environmental significance – a priority field response, a field response, no field response, or no further response. In the Supplement to the 1997 annual report, the ECO noted that this operational policy was developed in a priority-setting process in 1997, but not posted on the Registry for comment or released to the public. MOE claimed that it was not posted because of a security element: disclosure might aid those who violate environmental protection laws. However, the ECO pointed out that the ministry could have posted aspects of the policy that were suitable for public comment, and kept confidential those aspects that would pose a security risk.

The PRPIR guidelines suggest that MOE staff should refer certain callers and complainants to municipalities and other agencies if the activity is one that is not considered a priority. While protecting

air quality is a priority for MOE, Operations Division staff are not expected to deal with complaints that relate to noise, odour, dust and smoke. All complaints involving residential noise (e.g., idling cars), odour (e.g., roof tarring), or smoke (e.g., from barbecues, fireplaces or wood stoves) are referred to the local municipalities. Other incidents may be referred to other provincial ministries or agencies. There is no indication that the PRPIR were developed in consultation with municipalities or other ministries, or whether they were given the tools to deal adequately with the pollution incidents now being directed to their attention.

As an example of how the PRPIR is used, in 1998 the ECO received an application for investigation from applicants who alleged that a neighbour's wood-burning stove was producing noxious fumes, smoke and noise to the point of interfering with the normal use of the applicant's property. MOE denied the request for an investigation, stating it was not within its jurisdiction to respond to smoke and odour related to the operation of wood stoves and referred the applicants to the local municipality or fire department. The incident in the application presented an alleged violation of S. 14 of the *EPA*, which prohibits the discharge of a contaminant into the natural environment that is likely to cause an adverse effect. The ECO believes the investigation was denied because staff were following procedures established by the PRPIR.

In addition to the Delivery Strategies and PRPIR, MOE's use of voluntary agreements for environmental protection increased between 1995 and 2000, as the ministry looked for cost-effective ways to deliver its mandate. In the ECO's 1997 annual report, we noted that ministries were beginning to promote voluntary agreements, and called for these ministries to establish a general legal and policy framework for their use, after broad public consultation. MOE did not respond to this recommendation with a legislative or policy framework.

### Implications of Bill 82

In 1998, the Ontario government passed Bill 82, which amended environmental protection statutes to strengthen enforcement and investigation powers and penalties. The stronger enforcement and penalty provisions allow provincial officers to issue a broader range of orders, extend provisions that prohibit the illegal disposal of waste and introduce new penalties for polluters, such as increased maximum fines, wider use of jail terms, restitution orders, forfeiture of items seized as a result of an environmental offence, and court-directed forfeiture for collecting unpaid fines. Bill 82 also gave MOE the regulatory authority to introduce administrative monetary penalties (AMPs) for minor environmental infractions.

The regulation allowing the use of AMPs had not yet been implemented by the end of the comment period. However, MOE feels AMPs will be a key enforcement tool to help compel timely compliance with environmental protection legislation. These monetary penalties will be imposed, through an administrative process rather than through the courts, on those who violate environmental laws and regulations. MOE intends to use AMPs to capture some of the approximately 5,200 occurrences per year that are not currently being pursued. (According to MOE statistics, ministry staff forward more than 6,000 occurrences per year to the IEB. From April 1, 2000, to March 31, 2001, 963 tickets were issued by Abatement, the IEB and the Smog Patrol under Part I of the *Provincial Offences Act (POA)*. Other occurences were pursued as offences under Part III of the *POA*.) Once implemented, AMPs should prove to be a positive development for the ministry, as they will reduce the amount of staff

time required to pursue offences. MOE has advised the ECO that it expects to post a proposal notice soon for a regulation creating AMPs on the Environmental Registry, and the ECO looks forward to reviewing this in a future report.

In November 2000, the government enacted new legislation, the *Toughest Environmental Penalties Act (TEPA)*, which greatly increased the maximum penalties for major environmental offences. (See pages 101-102 for more information about this legislation.)

### The Shift Back to Mandatory Abatement

In the fall of 2000, the ECO was contacted by several stakeholder groups and by representatives of industry who had been advised that the ministry's internal policy had shifted from voluntary to mandatory abatement. These stakeholders were advised that ministry staff are now supposed to issue orders when they identify compliance problems, instead of agreeing to voluntary abatement strategies as outlined in the current Compliance Guideline.

The ECO contacted staff in MOE's Environmental Bill of Rights Office and requested additional information about this alleged shift in approach. We were concerned that such a shift to mandatory abatement should have been made public through explicit amendments to MOE's Compliance Guideline. We were advised that MOE's approach to abatement had not changed, and that no amendments to the Guideline would be posted on the Registry. Thus, the ECO decided not to pursue this matter as an unposted policy decision.

However, during the Walkerton Inquiry, an internal MOE memorandum, disclosed as part of the Inquiry evidence, announced a major shift in MOE's internal policy – from voluntary to mandatory abatement. The MOE memo, distributed to all district managers and supervisors in March 2000, called for strict compliance with MOE's Compliance Guideline and announced a movement away from voluntary abatement and towards mandatory abatement. The memorandum put forward a new interpretation of the section of the Compliance Guideline that previously permitted MOE to use voluntary abatement measures in specific situations. The memorandum sets out an expectation that, where even one of the mandatory criteria exists, a control document will be issued and mandatory abatement pursued. The memo states that MOE management expects that the use of voluntary abatement, where one of the mandatory criteria exists, will be the exception and will require authorization by a District Manager.

There are a number of other indications that MOE is taking a more aggressive approach to compliance. In testimony provided to a Standing Committee in April 2001, MOE's Deputy Minister advised that enforcement efforts have greatly increased recently. Thus, in 2000, MOE issued 1,265 orders, as opposed to 307 orders in 1999.

### MOE's SWAT Initiative

On September 21, 2000, MOE announced the creation of a "highly mobile and focused compliance, inspection and enforcement SWAT team" to "crack down on deliberate and repeat polluters and ensure they comply with Ontario environmental laws." The team, which includes inspectors, investigators, environmental engineers, environmental program analysts, scientists and a laboratory tech-

nician, was described by the minister as a "new group of environmental officers with an innovative approach." According to MOE, the SWAT Team is designed to:

- operate as a separate inspection, compliance, and enforcement unit within MOE, with its own management structure and support services.
- operate with advanced technological support to provide leading-edge environmental compliance.
- consist of investigators who will focus solely on the investigation and prosecution of environmental infractions identified by the team's compliance inspections.
- provide the results of its compliance, inspection and enforcement activities to the public.

For several years, the ECO has recommended that MOE be provided more resources to carry out its compliance role effectively. New compliance resources are a welcome development. However, the ECO also recognizes that this initiative is part of the shift in compliance that took place in early 2000, which included a shift away from voluntary abatement measures. In this light, the creation of SWAT appears to be directed at achieving compliance results as quickly as possible. As evidence of this, the SWAT team has found a 45 per cent rate of non-compliance in approximately 100 inspections conducted in two industrial sectors up to the close of our reporting year.

For the following reasons, the ECO believes that the success of SWAT will depend on public disclosure, compatibility with existing ministry compliance programs, and accountability and transparency.

***Public disclosure:*** This promised aspect should help to build public confidence in the SWAT approach. The unit is supposed to make its activities public and to have its own Web page. However, the ECO has not yet found evidence of this.

***Compatibility with existing ministry compliance programs:*** Though a separate unit, the SWAT team will need to work with the existing MOE Investigation and Enforcement Branch. Compatibility is a must – or the public may question the efficiency of establishing a separate unit rather than shoring up existing compliance efforts.

***Accountability and transparency:*** If the new body appears to be operating independently of existing provincial enforcement goals and programs, then its accountability might be questioned. The public and the regulated community will need to know if the unit will operate in the same manner or different from existing compliance procedures.

The Environmental Commissioner welcomes the strengthening of compliance efforts in the province, and awaits the results of this new approach to compliance. We will continue to monitor the SWAT initiative to ensure that lasting environmental protection, accountability, and effectiveness are hallmarks of this new development.

## Pollution Hotline

In April 2001, MOE launched a new toll-free, 24-hour public hotline for reporting pollution. Announcing the hotline, the Minister of the Environment stated that it is another part of the government's commitment "to get tough on polluters and strengthen environmental compliance and enforcement." MOE also stated that the hotline will be used to "gather information on new and emerging environmental issues." The pollution hotline is answered at the existing 24-hour Spills Action Centre hotline for reporting spills and emergencies. However, the ECO has been made aware of situations where the hotline has not dealt appropriately with calls. It is also unclear what criteria are being used when information is received by the hotline.

## Indicators of Continuing Compliance Problems

### Applications and Complaints to the ECO

In recent years, the ECO has received a number of complaints relating to enforcement and compliance issues. For example, in our 1999-2000 annual report, we noted that three applications for investigation were submitted by applicants who were concerned with noise and odour impacts on their health, their property and the environment. The sources of noise and odours included a drag strip raceway, a milling operation, and a recycling plant. MOE did investigate the allegations contained in these applications and found either a clear contravention of Section 14 of the *EPA* or an adverse environmental effect in each case. Yet the ministry did not take any direct enforcement action against any of the contravenors.

In 2000, the ECO received an application that called for a review of the compliance approach used by MOE's eastern Ontario office, alleging that the office was not applying the Compliance Guideline consistently and diligently, particularly with respect to a certain waste management operation. MOE denied the request for review and defended its recent enforcement activity at this facility. But MOE failed to respond fully to the broader concerns of the applicants about its approach to compliance. (For a full description of this application, see pages 196-197 of the Supplement to this report.)

### Biosolids

The ECO has noted a growing public concern about the management of septage, sewage treatment operations and sewage sludges in Ontario since 1999. The ECO has also received several applications requesting a review or investigation of these matters. In most of these applications, the complainants feel that the existing guidelines, regulations and systems of compliance that govern these activities are unable to provide acceptable resolutions to their concerns. We believe that these trends collectively indicate that greater compliance and enforcement action are required in this area (for greater detail, see pages 48-56 of this report). The trends also indicate that the public expects a clearer and more transparent account of MOE's compliance procedures for biosolids, including how the biosolids guidelines are applied.

**Safety-Kleen**

The Safety-Kleen facility is Ontario's only commercial hazardous waste landfill and incinerator. Given the nature of this facility's activities, it is, not surprisingly, subject to heightened public concern. The ECO received two applications for investigation in the reporting year related to this facility. These applications highlighted the fact that since January 1998 this facility has been the subject of hundreds of complaints. The ECO also requested copies of and reviewed almost 300 occurrence reports logged by MOE in a 25-month period between 1998 and 2000 related to Safety-Kleen's operations. A voluntary approach has been used extensively over this period to attempt to resolve compliance issues such as complaints from residents about odour, exceedances of air emissions and groundwater limits, and instances of non-compliance with reporting requirements. Safety-Kleen has arrangements with MOE so that the facility itself in many instances investigates complaints about its own non-compliance incidents, and reports back to MOE without verification or validation by the ministry. When MOE has confirmed non-compliance, the ministry has usually requested the facility to provide a mechanism and a timeframe for achieving compliance instead of using mandatory compliance measures. The large and continuing number of complaints suggests that the voluntary approach may not be capable of solving some of the problems that can result from such operations.

Furthermore, based on our review, it is apparent that MOE is inconsistent in dealing with similar occurrences at this site, sometimes referring them to its Investigation and Enforcement Branch and sometimes not. The ECO believes that Safety-Kleen's track record on resolving issues through the voluntary approach indicates that MOE's decision to shift toward mandatory compliance was appropriate and long overdue. In late 1999 and 2000, MOE did issue some orders against Safety-Kleen related to a leak in the landfill, and closed the facility for 10 days. (For more on this facility, see pages 139-143 of this report).

**Contraventions Revealed by Inspections**

In the wake of the Walkerton tragedy, MOE undertook a large number of inspections of water treatment plants and other facilities. MOE data from this blitz indicated that when inspections took place (in 1999/2000), significant contraventions were found in 31 per cent of the investigations. According to MOE, the most common deficiencies at the plants inspected included:

- insufficient frequency of sampling for bacteria or chemical analysis.
- inadequately maintained disinfection equipment.
- a lack of chlorination for groundwater.
- a lack of filtration, coagulation and flocculation (processes to remove particles) for facilities using surface water.
- inadequate training or inappropriate certification for plant operators.

The ECO believes that MOE would have generally been aware that these kinds of problems existed at water treatment plants before the blitz took place in 1999 and 2000, and that mandatory measures to correct these deficiencies could have been applied sooner. During the inspection blitz, MOE issued orders to take corrective action to at least 311 facility owners. The ECO believes that the high rate of deficiencies found and orders issued indicates an ongoing problem with compliance prior to 1999.

Such a high incidence of non-compliance also suggests that previous attempts at voluntary compliance have not been successful and greater enforcement is needed through regular inspections.

### Fluctuating Prosecution Rates

The prosecution of contravenors is only one component of a compliance and enforcement strategy. Nevertheless, the number of charges laid by MOE is an important indicator of the extent and type of compliance activity. When compliance policy favours mandatory action rather than voluntary abatement, there will be an increase in charges laid and the corresponding number of convictions. Also, the possibility of an environmental charge acts as a deterrent to illegal activity. The benefit of having a significant number of charges laid by MOE with a possibility of conviction is thus twofold: it punishes those who are not in compliance and deters those who may be verging on non-compliance.

Charges for environmental offences and convictions based on those charges reached an all time low in 1996. In 1992, 2,158 charges were laid by MOE. In 1995, 1,045 charges were laid, resulting in 504 convictions. The numbers dropped again in 1996 to 758 charges, resulting in 366 convictions. After 1996, charges and convictions numbers rose. In 1997 there were 951 charges and 418 convictions. In 1998 there were 805 charges and 414 convictions, and in 1999, 1,216 charges and 611 convictions. Finally, in 2000, MOE laid 1,796 charges, which resulted in 770 convictions.

### Increasing Use of Orders

In the reporting period, the ECO noted a shift toward MOE's issuing more Provincial Officers' Orders under both the *EPA* and the *OWRA*. According to MOE, there was a 312 per cent increase in the number of orders issued in 2000 from 1999. This is probably the result of amendments made to these Acts by Bill 82 and *TEPA*, and indicates MOE's shift back to mandatory enforcement.

### Failure to Review Older C of A

To promote compliance with current laws and regulations, MOE should regularly review older Cs of A to ensure that they are updated to reflect changes in technologies and equipment at plants, and to ensure that current standards are followed by operators. Certain MOE compliance tools are in the form of guidelines that have the force of law only when contained in a C of A.

It has been estimated that companies and individuals rely on nearly 220,000 Cs of A to conduct their operation – and that many are more than 20 years old. Each year, MOE issues approximately 8,000 new Cs of A. It is essential that MOE staff exercise great care when these new Cs of A are issued. Evidence presented to the Walkerton Inquiry suggests that ministry staff were failing to inspect and review existing Cs of A to ensure compliance with current MOE standards. In the wake of Walkerton,

MOE decided to review all the Cs of A for water treatment plants. Moreover, MOE has stated that it intends to ensure that many older Cs of A for facilities are reviewed in the coming years.

## Confusion About the Roles of Voluntary and Mandatory Compliance

In his 1999/2000 report to the Ontario Legislature, the Provincial Auditor found that in certain instances environmental officers, charged with enforcing non-compliance, "responded inappropriately, such as using voluntary compliance measures where mandatory compliance was required. . ." and was concerned ". . .that the guidelines allowed environmental officers the discretion to use voluntary measures even in cases of significant or repeat violations and in cases where corrective action had not been taken on a timely basis."

The Auditor's finding demonstrates that the shift prior to 1998 toward more voluntary measures was creating confusion among staff out in the field. A former Assistant Deputy Minister with MOE has acknowledged that many staff were unsure about how to implement voluntary compliance measures or when they should do so. It was also felt by many that the traditional enforcement measures would be more effective in achieving compliance, but they were receiving directives from the minister to limit their use. In fact, in 1998, training of field staff was conducted to ensure they fully understood the new policy surrounding the Delivery Strategies and the PRPIR. The training was seen as necessary because the staff had never been privy to the confidential Cabinet documents.

## Conclusion

The ECO notes MOE's significant shift since spring 2000 toward requiring greater mandatory compliance. There is evidence that voluntary approaches to compliance are less effective than mandatory compliance at achieving important environmental goals and that they have the notable weakness of frustrating complainants.

The ECO acknowledges there are new resources at MOE for compliance and agrees that they are required. It is too early to determine whether SWAT will be an effective approach to increasing compliance. AMPs could be an efficient and effective new development.

The ECO commends MOE for reviewing all the certificates of approval for municipal water treatment plants and for analyzing water treatment plant compliance during the reporting period. The ECO encourages MOE to continue in this positive direction and implement better compliance procedures in other sectors as well.

As indicated by our review of MOE's PRPIR policy, by applications for investigation received by the ECO, and by the lack of enforcement of the 3R regulations (described on pages 91-97), there are significant continuing problems with compliance and enforcement. It's clear that MOE should focus its attention on existing laws and regulations that are not being enforced at the present time.

It is important that the public see consistent evidence of mandatory compliance in order to restore confidence in the ministry's ability to protect human health and the environment. MOE must also clarify its Compliance Guideline so that both MOE staff and the public can understand how it is to be interpreted.

*For ministry comments, see page 195-197.*

## Recommendation 6

**The ECO recommends that:**

MOE make its compliance policies and procedures consistent and clear to the public, to MOE staff, and to the private and municipal sectors.

## Recommendation 7

**The ECO recommends that:**

MOE and MMAH review the need for enabling legislation, such as amendments to the *Municipal Act*, in order to allow municipalities to implement properly the environmental compliance responsibilities delegated to them by MOE.

# UpDate: Provincial Groundwater Strategy

The ECO first outlined the components needed for a provincial groundwater strategy in its 1996 annual report and has continued since then to raise concerns about groundwater protection in Ontario. A number of groundwater-related developments occurred in 2000/2001, most of which underscored the continued need to have in place a comprehensive strategy for the protection of groundwater in the province. The following text provides a brief update on some of these issues and indicates where further action is needed.

### Concerns about Groundwater Quality

The Walkerton *E. coli* contamination tragedy of May 2000, and the Inquiry subsequently established by the provincial government to examine the circumstances that led to the tragedy, increased the awareness of the need for groundwater protection in Ontario. Evidence presented at the Inquiry hearings in 2000 and 2001 suggests that the town's water supply system became contaminated with *E. coli* bacteria from cattle manure found on a property near one of the town's water wells.

In addition to Walkerton, a number of other communities also faced groundwater quality issues in 2000/2001, including the Cities of Barrie and Orillia, the Towns of Kincardine, Fergus and Orangeville, and Loyalist Township near Belleville.

### Concerns about Groundwater Depletion

In the ECO's 1999/2000 annual report, we reported that water shortages and competition for water are ongoing concerns in many parts of Ontario. In the past year, the ECO gathered more evidence

It is important that the public see consistent evidence of mandatory compliance in order to restore confidence in the ministry's ability to protect human health and the environment. MOE must also clarify its Compliance Guideline so that both MOE staff and the public can understand how it is to be interpreted.

*For ministry comments, see page 195-197.*

## Recommendation 6

**The ECO recommends that:**
MOE make its compliance policies and procedures consistent and clear to the public, to MOE staff, and to the private and municipal sectors.

## Recommendation 7

**The ECO recommends that:**
MOE and MMAH review the need for enabling legislation, such as amendments to the *Municipal Act*, in order to allow municipalities to implement properly the environmental compliance responsibilities delegated to them by MOE.

# UpDate: Provincial Groundwater Strategy

The ECO first outlined the components needed for a provincial groundwater strategy in its 1996 annual report and has continued since then to raise concerns about groundwater protection in Ontario. A number of groundwater-related developments occurred in 2000/2001, most of which underscored the continued need to have in place a comprehensive strategy for the protection of groundwater in the province. The following text provides a brief update on some of these issues and indicates where further action is needed.

### Concerns about Groundwater Quality

The Walkerton *E. coli* contamination tragedy of May 2000, and the Inquiry subsequently established by the provincial government to examine the circumstances that led to the tragedy, increased the awareness of the need for groundwater protection in Ontario. Evidence presented at the Inquiry hearings in 2000 and 2001 suggests that the town's water supply system became contaminated with *E. coli* bacteria from cattle manure found on a property near one of the town's water wells.

In addition to Walkerton, a number of other communities also faced groundwater quality issues in 2000/2001, including the Cities of Barrie and Orillia, the Towns of Kincardine, Fergus and Orangeville, and Loyalist Township near Belleville.

### Concerns about Groundwater Depletion

In the ECO's 1999/2000 annual report, we reported that water shortages and competition for water are ongoing concerns in many parts of Ontario. In the past year, the ECO gathered more evidence

on the extent of this problem. Spencer Creek, a small watercourse in southwestern Ontario with a baseflow supported by groundwater, disappeared temporarily in the summer of 2000 because of excessive takings from the local watershed.

Low precipitation levels in the late 1990s caused concern about the depletion of groundwater resources and low water levels in lakes and rivers. Groundwater reserves become particularly vital to the natural environment during low water conditions in many parts of southern Ontario.

Many municipalities in Ontario are taking action to study or protect groundwater. The Township of Oro-Medonte completed a groundwater supply study out of concern about groundwater use by water bottling plants. Three municipalities in the Greater Toronto Area are undertaking a groundwater resources study of the Oak Ridges Moraine. The City of Kawartha Lakes (which includes the former Town of Lindsay) is also considering instituting a groundwater protection program in response to groundwater pressures in the area.

## ECO's Special Report and Brief on Water Takings

In July 2000, the ECO issued a special report, "The Protection of Ontario's Groundwater and Intensive Farming." And in January 2001, to assist the Walkerton Inquiry with its investigation of the town's contaminated water tragedy, the ECO submitted a brief to the Inquiry on the Ministry of the Environment's Permit to Take Water program. (For more on these publications, see the ECO's Web site www.eco.on.ca ).

## Government Record on Groundwater in 2000/2001

**Ontario Water Response – 2000**

In July 2000, the Ministry of Natural Resources posted a notice on the Environmental Registry that it was seeking public input on a policy proposal called the Ontario Water Response – 2000, aimed at establishing "a response plan to deal with low water conditions in Ontario." The initiative is guided by the Ontario Water Directors Committee (OWDC), with representatives from various ministries. In May 2001, MNR posted a decision regarding OWR-2000, and although the initiative has been finalized, MNR reports that a "permanent policy to address drought conditions as well as broader water management issues" is still being developed. The ECO will be reviewing this decision in our next annual report.

**Operation Clean Water**

On August 8, 2000, in the wake of the Walkerton tragedy, the Minister of the Environment and the Premier launched Operation Clean Water in order to augment continuing efforts to improve water quality and protect public safety. This collection of separate water-related initiatives included, among other measures, consultations to be undertaken by at least three different ministries on:

- groundwater management
- nutrient (manure) management
- regulation of small waterworks facilities

The ECO review found no publicly available information (e.g., meeting invitations, workshop reports) regarding the consultation on groundwater management that was reported to have been carried out in the spring of 2000 by a Parliamentary Assistants Committee (Parliamentary Assistants are MPPs appointed to assist ministers with the work of particular ministries). Consultations were jointly undertaken by MOE and the Ontario Ministry of Agriculture, Food and Rural Affairs on nutrient management, but any resulting legislation to protect groundwater – the purpose of the consultation – has not been made public. With regard to the regulation of small waterworks, MOE reported in March 2001 that it is developing options based on the comments made to the Parliamentary Assistants in their consultations on this issue.

**Provincial Groundwater Monitoring Network**

The Provincial Groundwater Monitoring Network, a partnership of MOE, conservation authorities and Ontario municipalities, was launched in October 2000 with the intent of providing information to help in making decisions about water takings, drought management, protection of groundwater quality, land use planning, and related health and safety issues. MOE proposes to install approximately 10 monitoring wells in each conservation authority area in the province, for an approximate total of 400 stations. Work has begun in eight watersheds. Until such a network can begin to inform decision-making, the ECO believes that MOE may be making decisions affecting the province's groundwater resources without access to current information about groundwater conditions in some parts of Ontario. The ECO has learned that prior to this initiative, MOE had prepared inventories of groundwater resources for 10 watersheds in southern Ontario, but did not made this information public.

**Financing of Groundwater Studies**

MOE reports that it is has been financing 34 municipal groundwater studies through the Provincial Water Protection Fund. These were expected to be completed by March 31, 2001, with MOE reporting the results thereafter. In addition, the province announced the Ontario Small Town and Rural (OSTAR) Development Initiative, a program of the Ontario SuperBuild Corporation, in fall 2000. Studies eligible for funding under OSTAR include those which enable municipalities to develop a way of managing "groundwater supplies for current and future users." This program may enable a municipality to undertake a groundwater study if it elects to do so, but the program is not dedicated primarily to this objective. Municipalities can apply to OSTAR for a wide variety of infrastructure needs.

**Provincial Water Resource Information Project and Land Information Ontario**

Both MNR and MOE say they are connecting groundwater information to land use planning information in an electronic database/mapping system known as a "geographic information system." MNR referred to the Provincial Water Resource Information Project and MOE to Land Information Ontario as progress on this issue. The ECO is aware that efforts are under way, but not aware of any results of these initiatives being made public in the form of useable maps or a database. Last year,

MOE reported that water takings were being assigned coordinates that could be used for mapping purposes.

**MOE's Permit to Take Water/Guidelines and Procedure Manual**

MOE has indicated that revisions are needed to its Permit to Take Water/Guidelines and Procedures Manual to support implementation of its Water Taking and Transfer Regulation (O. Reg. 285/99). These revisions are important because they will spell out how MOE staff are to assess the impacts that water takings will have on the natural functions of the ecosystem. But these revisions are not yet complete; thus, MOE continues to issue PTTWs using its outdated guidelines and procedure manual.

**Groundwater Contamination from Leaking Underground Storage Tanks**

The Ministry of Consumer and Business Services has been meeting with MOE and the Technical Standards and Safety Authority (TSSA), the agency which administers the *Gasoline Handling Act*, to examine the existing regulatory framework on handling fuels and determine what further actions could strengthen groundwater protection. In particular, MCBS reports that work is ongoing to determine the potential risk of groundwater contamination from leaking underground storage tanks and to develop actions to address the potential risk. TSSA has committed to hiring an additional five fuels safety inspectors to ensure compliance with all regulatory requirements.

MOE contends that various components of a groundwater strategy will be finalized in 2001. The ECO is concerned that although several ministries have committed to advancing groundwater protection for a number of years, they have not delivered on these commitments. In response to the ECO's January 2001 brief on permits to take water, for example, the Minister of the Environment indicated that the province would await the outcome of the Walkerton Inquiry before acting.

## Continuing Gaps in a Provincial Groundwater Strategy

The ECO found that significant gaps in a groundwater strategy persist, as described in the following chart, and are particularly evident in two major areas:

- an inventory of current and past groundwater use, including sources of groundwater contamination and the evaluation of their effects on ecosystems and human health
- an economic assessment of groundwater value, including its current and replacement values.

The ECO remains concerned about the ability of the province to protect groundwater resources when such significant gaps remain, and when neither quantitative objectives nor completion dates have been proposed.

## A Groundwater Management Strategy: How close has the government come?

| ECO-recommended Strategy Component | State of Advancement |
|---|---|
| Publicly accessible inventory of groundwater resources | Limited development |
| Groundwater resources data management system | Possibly in formative stage |
| Long-term monitoring network of water levels for major aquifer systems | In formative stage |
| System to identify and protect sensitive aquifers and groundwater recharge areas | Limited development |
| Inventory of current/past groundwater use, sources of groundwater contamination, and evaluation of effect on ecosystems and human health | No significant development |
| Strong regulatory program aimed at preventing contamination | Limited development |
| Economic assessment of groundwater value, including current and replacement value | No significant development |
| Well-coordinated decision-making between all ministries and agencies having groundwater jurisdiction | Limited development |

There are several areas in which progress has been made. Components of an inventory of groundwater resources and data management system exist (e.g., georeferencing of permits to take water, the water well database, the Provincial Groundwater Monitoring Network). However, the components are not assembled in a complete, integrated and publicly accessible form. References to the ongoing management of groundwater information have been made by MOE, but a groundwater resources data management system appears to be, at best, in its formative stage.

While the Provincial Groundwater Monitoring Network could form a long-term monitoring network of water levels for major aquifer systems, MOE has not made a commitment to maintain this network on a long-term basis. The Network could also contribute to other components of a groundwater strategy, as it is also designed to deliver information on water quality and regional groundwater status and to produce digital maps.

Regulatory programs to prevent contamination from sources such as gasoline storage tanks and agricultural runoff are under development through initiatives led by OMAFRA and the TSSA.

Municipalities could potentially use the OSTAR program funds to identify and protect sensitive aquifers and groundwater recharge areas. However, as noted above, this program is not dedicated to this purpose and municipalities need to choose to carry out groundwater studies. Sensitive aquifer protection is further hindered because MOE has not finished revising the manual that will outline to ministry staff how ecological considerations are to be accounted for when they make decisions about water taking permits.

Finally, three initiatives, Ontario Water Response - 2000, Water Resources Information Project and the Ontario Water Directors Committee, could make positive contributions to coordinated decision-making between all ministries and agencies having groundwater jurisdiction and help identify sensitive recharge areas. However, the roles of these initiatives within a comprehensive groundwater strategy remain unclear. The ECO believes that these initiatives must be coordinated so that all min-

istries and agencies involved in decisions on groundwater resources are aware of their roles and responsibilities.

### ECO Comment

Many components needed for an effective provincial groundwater strategy are still in their formative stage and efforts continue to be fragmented across several ministries. This increases the need for coordination and public transparency. The need for action and implementation is as great as ever.

*For ministry comments, see page 197-198.*

## Update: Rehabilitating the Abandoned Kam Kotia Mine

The Kam Kotia mine, near Timmins, operated intermittently under private ownership from 1942 to 1972, producing copper and zinc concentrates, and gold and silver. Property ownership has since reverted to the provincial government. According to an August 2000 "Phase I Report" on rehabilitating the Kam Kotia mine, this "is one of the most significantly challenging sites in Canada to rehabilitate."

During the mine's operation, more than six million tonnes of strongly acid-generating waste rock and mine tailings (crushed rock by-product of mining) were placed in three areas covering more than 500 hectares. Because the waste rock and tailings were disposed of in an uncontrolled manner, they were exposed to rain, wind and, in some places, swampy site conditions. The waste rock and tailings continue to release a highly acidic brew of contaminated water and metals.

The Kam Kotia area is very unsightly, with no vegetation growing on the mine tailings and waste rock. A large "vegetation kill zone" caused by the tailings and run-off is covered with dead trees and parts of the site are colored orange from the contamination.

Water in the Kamiskotia and Little Kamiskotia Rivers is contaminated with metal levels far exceeding the province's water quality objectives (PWQO). For example, in its February 2000 response to an *EBR* investigation request, MOE wrote that discharges to the rivers contain a concentration of copper exceeding the PWQO by 2,000 times and a concentration of zinc exceeding the PWQO by 1,000 times.

The sediment of the two rivers is also contaminated. In one location on the Kamiskotia River, sediment has been reported to exceed MOE's Sediment Quality Severe Effect Level for copper, iron and arsenic. Some sediment contamination readings have been reported in nearby Kamiskotia Lake. On-site groundwater is polluted. Although fish habitat in the rivers has been affected, the actual effect on fisheries remains undefined. Left unchecked, it is estimated that the mine tailings and run-off would impair the environment for another 100 years.

As explained below, the government has committed to cleaning up the Kam Kotia mine area. Key components of the proposed rehabilitation project include:

- excavating and consolidating a portion of the mine tailings into one location and building a dam to contain them.
- constructing soil covers for mine tailings areas to reduce exposure to the elements.
- stabilizing an existing tailings dam.
- rehabilitating and securing the former mine plant areas.
- cleaning up the on-site creeks and rehabilitating the confluence of the Little Kamiskotia River and south seep diversion ditch.
- collecting contaminated water from the site and treating it at a "lime addition plant" to be constructed on-site. The addition of lime will help to neutralize the acidity of the water.

According to the Phase I Report, which summarizes existing site conditions, presents options and a recommended clean-up solution, the treatment plant and the related seepage and run-off collection system will need to operate for approximately 50 years. Construction of the collection system and treatment plant and the new tailings dam is scheduled to begin during the summer of 2001.

In 1999, the ECO received an application for investigation under the *EBR*, alleging violations of the *Environmental Protection Act*, the *Ontario Water Resources Act* and the *Fisheries Act* at the Kam Kotia mine. The Ministries of Natural Resources and Environment, which are responsible for administering this legislation, granted the investigation and confirmed the severity of environmental degradation. In their responses to the applicants, both ministries referred to a provincial government commitment to begin clean-up activities. Specifically, in February 2000, the Ministry of Northern Development and Mines announced an investment of $3 million over three years to begin site remediation. This funding came from MNDM's $27 million, four-year mine rehabilitation program to address safety and environmental issues at some of Ontario's more than 6,000 abandoned mine sites.

In October 2000, the government accelerated the Kam Kotia project and increased the funding to $9 million over two years. The funds were committed to "minimize potential problems that could impact public health and safety and water quality" and to provide "a first step to ensuring an improvement to the quality of life of the residents in the area, as well as enhancing the habitat for fish and waterfowl."

The funding increase followed the completion of the Phase I consultant's report, which projected that more than $41 million would be needed, mostly for capital expenditures, to rehabilitate the site, and that the expected period of treatment would be 50 years. This estimate is presented in "year-2000 dollars" and includes a 30 per cent cost contingency. It does not include the cost of the long-term monitoring work needed to assess the effectiveness of remediation efforts.

The ECO commends the Ministries of Natural Resources and Environment for granting the local residents' application for investigation and is pleased that government responded with a long overdue commitment to site rehabilitation. Unfortunately, however, the current funding of $9 million covers

only part of the proposed rehabilitation activities and seems to provide for only partial recovery of the local ecosystem. The Phase I consultant's report also projected that after the completion of several stages of work (enabled by the $9 million funding), water quality in the Little Kamiskotia River "could" meet the PWQO for copper and "approach" the PWQO for zinc. But the report also cautioned that additional clean-up activities at the site and 50 years of treatment would be required before metal loadings in the river would decrease enough to result in improved aquatic habitat, especially for fish. However, MNDM is more optimistic that marked improvements can be expected well before the end of the 50-year treatment period.

MNDM, which is responsible for administering the province's mine rehabilitation guidelines, has the following three objectives for this type of work:

- protecting public health and safety.
- lessening or eliminating negative environmental impact.
- allowing for a return to productive use of the land.

MNDM also has the following site-specific objectives for the Kam Kotia site:

- stopping acid drainage and mine tailings from reaching the Little Kamiskotia and Kamiskotia Rivers.
- progressively rehabilitating the site.

The Ministries of Northern Development and Mines, Natural Resources, and Environment are all contributing valuable expertise to this project. Given the severity of environmental contamination, the ministries should commit to reviewing the progress of rehabilitation efforts in keeping with both the general and specific objectives, and should take the necessary measures to meet those goals and ensure adequate site clean up.

In keeping with the spirit of the *EBR* and past commitments made by the ministries, local residents should be informed on a regular basis as site clean up progresses. The ECO also recommends that MNDM keep the general public informed by updating its information notice on the Environmental Registry at key stages of the Kam Kotia rehabilitation project. MNDM has indicated that it will periodically update the notice for the duration of the work.

## Update: Compliance with the 3R Regulations and the Industrial, Commercial and Institutional Sectors

The ECO has addressed the challenge of waste diversion in past annual reports. Most recently, in 1998, the Environmental Commissioner recommended the promotion of product stewardship, based on experience in other Canadian provinces and in Europe. Product stewardship reduces the pressure that is now on municipalities to deal with waste because it requires brand owners, distributors, packaging producers and other manufacturers to take increased responsibility for managing the wastes associated with the manufacture, use, treatment and or disposal of their products. In the ECO's 1996

report, in order to address the number of containers being disposed of at landfills or through municipal recycling activities, the Commissioner recommended that the Ministry of the Environment enforce the regulations regarding the percentage of soft drinks that must be produced and sold in refillable containers.

## ECO Research Project

In late 2000, the ECO undertook a research project to review compliance with Ontario Regulations 101/94, 102/94, 103/94 and 104/94 (the "3R regulations") in the Industrial Commercial and Institutional sectors – the "IC&I" sectors. The scope of the work included a series of interviews with stakeholders and experts involved in waste generation, collection, processing, recycling and disposal, and with officials in the provincial government. The research also included the analysis of disposal and diversion data and packaging reduction data, as well as the investigation of provincial monitoring and enforcement around these regulations.

In total, 29 interviews were conducted with representatives from the Ministry of the Environment and from municipalities, environmental non-governmental organizations , companies that use recyclable materials to make new products, small waste processing companies, consulting firms and waste generators.

## Brief Overview of Waste Reduction Efforts in Ontario Since 1990

In February 1991, the Ontario government established the Waste Reduction Action Plan (WRAP). This initiative was in response to concerns about projections that suggested Ontario would face a huge solid waste disposal problem by the mid-1990s. Prior to 1997, the U.S. government had prohibited solid waste imports from Ontario unless the waste was incinerated, and space was beginning to run out in Ontario's existing landfill sites. Also, the process of finding sites for new landfills was becoming difficult, both technically and politically. One government publication stated that it was costing Ontario municipalities $400 million annually to collect and dispose of waste, and predicted that by 1995 more than half of Ontario's residents would have no place to put their waste.

One of the key goals of WRAP was to ensure that Ontario would reach a provincial waste reduction target of diverting 50 per cent of waste from disposal by 2000, using 1987 as the base year. This diversion rate is calculated by weight on a per capita basis. To help achieve this goal, WRAP had several components. The most important was the development of what are commonly called the 3R regulations to stimulate reduction, reuse and recycling in the municipal and IC&I sectors (see "The 3R Regulations" below). The original intention was that the 3R regulations would function in the context of clear 3R funding programs, administered by the Waste Reduction Office (WRO) of MOE. WRAP was based on the development of a comprehensive public education program to provide information, training and technical assistance on waste reduction and the recycling of waste.

When the regulations were brought into force in 1994, they were accompanied by a series of guides published by WRO to help waste generators, packagers, municipalities and recycling site operators understand and comply with the requirements contained in the regulations. Moreover, those affected by the regulations had WRO as a source of support for communication and education purposes. What has become apparent since 1994 is that promoting compliance with the 3R regulations is no

## The 3R Regulations

**O. Reg. 101/94 – Recycling and Composting of Municipal Waste**
**O. Reg. 102/94 – Waste Audits and Waste Reduction Workplan**
**O. Reg. 103/94 – Industrial, Commercial and Institutional Source Separation Programs**
**O. Reg. 104/94 – Packaging Audits and Packaging Reduction Workshops**

The regulations, still in effect, require that 3R activities be undertaken by designated municipalities and the institutional, commercial and industrial (IC&I) sectors in order to help Ontario reach its provincial waste reduction target.

O. Reg. 101/94 requires that municipalities with a population greater than 5,000 establish residential source-separation programs, backyard composting programs, and leaf and yard waste composting programs.

O. Reg. 102/94 requires that certain larger retail shopping complexes, schools, restaurants, office buildings, hotels and motels, multi-residential buildings, manufacturing sites, and construction and demolition projects undertake annual waste audits and develop waste reduction work plans. The waste audit should examine strategies to reduce, reuse and recycle waste and set out who will implement each part of the plan, when each part will be implemented, and the expected results. Owners are required to communicate the work plans to all employees.

O. Reg. 103/94 applies to the same sectors as O. Reg. 102/94, and requires that they implement on-site source-separation programs for materials such as old corrugated cardboard, food and beverage containers, fine paper, newsprint. Brick, concrete, wood, drywall and steel must be included in the source-separation program in construction and demolition projects. Information about the source-separation program must be provided to all users and potential users. The required sectors must make reasonable efforts to implement source-separation programs for recyclables and reusable materials, and ensure that the separated waste is reused or recycled.

O. Reg. 104/94 targets certain manufacturers and importers or packagers of packaged food, beverage, paper or chemical products. These companies are required to undertake packaging audits and work plans every two years. The audits and work plans are intended as ways of evaluating the opportunities for 3R activity, including actions that will help ensure a reduction in the amount of packaging used; an increase in reused or recycled content; an increase in reusability and recyclability of packaging; a reduction in the overall environmental impact of the packaging that becomes waste; and a reduction in the burden of waste for consumers.

longer a program priority. And with the demise of WRO in fall 1994, communication and education efforts directed at the IC&I sector have stopped.

When the 3R regulations were brought into force in March 1994, the then Minister of the Environment stated that "the new requirements will divert as much as 2 million tonnes of waste a year" and that "we will meet our year 2000 target of 50% waste reduction in ways that benefit both our environment and economic recovery."

In 1995, MOE undertook an extensive review of all of its regulations to determine if their objectives were still valid and if there was a continuing need for each regulation. MOE staff reviewers con-

## The 3R Regulations

**O. Reg. 101/94 – Recycling and Composting of Municipal Waste**
**O. Reg. 102/94 – Waste Audits and Waste Reduction Workplan**
**O. Reg. 103/94 – Industrial, Commercial and Institutional Source Separation Programs**
**O. Reg. 104/94 – Packaging Audits and Packaging Reduction Workshops**

The regulations, still in effect, require that 3R activities be undertaken by designated municipalities and the institutional, commercial and industrial (IC&I) sectors in order to help Ontario reach its provincial waste reduction target.

O. Reg. 101/94 requires that municipalities with a population greater than 5,000 establish residential source-separation programs, backyard composting programs, and leaf and yard waste composting programs.

O. Reg. 102/94 requires that certain larger retail shopping complexes, schools, restaurants, office buildings, hotels and motels, multi-residential buildings, manufacturing sites, and construction and demolition projects undertake annual waste audits and develop waste reduction work plans. The waste audit should examine strategies to reduce, reuse and recycle waste and set out who will implement each part of the plan, when each part will be implemented, and the expected results. Owners are required to communicate the work plans to all employees.

O. Reg. 103/94 applies to the same sectors as O. Reg. 102/94, and requires that they implement on-site source-separation programs for materials such as old corrugated cardboard, food and beverage containers, fine paper, newsprint. Brick, concrete, wood, drywall and steel must be included in the source-separation program in construction and demolition projects. Information about the source-separation program must be provided to all users and potential users. The required sectors must make reasonable efforts to implement source-separation programs for recyclables and reusable materials, and ensure that the separated waste is reused or recycled.

O. Reg. 104/94 targets certain manufacturers and importers or packagers of packaged food, beverage, paper or chemical products. These companies are required to undertake packaging audits and work plans every two years. The audits and work plans are intended as ways of evaluating the opportunities for 3R activity, including actions that will help ensure a reduction in the amount of packaging used; an increase in reused or recycled content; an increase in reusability and recyclability of packaging; a reduction in the overall environmental impact of the packaging that becomes waste; and a reduction in the burden of waste for consumers.

longer a program priority. And with the demise of WRO in fall 1994, communication and education efforts directed at the IC&I sector have stopped.

When the 3R regulations were brought into force in March 1994, the then Minister of the Environment stated that "the new requirements will divert as much as 2 million tonnes of waste a year" and that "we will meet our year 2000 target of 50% waste reduction in ways that benefit both our environment and economic recovery."

In 1995, MOE undertook an extensive review of all of its regulations to determine if their objectives were still valid and if there was a continuing need for each regulation. MOE staff reviewers con-

cluded that the initial objectives for the creation of the 3R regulations were still valid. Moreover, non-regulatory mechanisms, such as voluntary programs or agreements between private corporations and the government (Memoranda of Understanding or MOU), were not deemed to be sufficient to meet Ontario's diversion objectives. In their reviews of O. Reg.102 and O. Reg. 104, MOE staff wrote: "Waste management affects so many sectors that a non-regulatory tool such as an MOU would not reach the scope of this regulatory approach. Economic mechanisms are not deemed appropriate in this case as the private sector pays for waste disposal anyway, which just reinforces this regulatory approach of provoking diversion and reduction awareness."

## Status of Waste Diversion in Ontario Today

Even before the enactment of the regulations in 1994, waste diversion in the IC&I sectors in Ontario began to increase, according to MOE. And the increase in diversion appears to have continued immediately after the 3R regulations were passed. However, according to data collected by Statistics Canada for 1998, diversion in Ontario in the government and business sectors has leveled off to a per capita rate of 28 per cent, lagging fourth in Canada behind British Columbia, Nova Scotia and Quebec, where diversion rates for IC&I are 30 per cent and greater. Ontario's IC&I per capita diversion rate is also 2 per cent below the national average. Total IC&I waste disposed of in Ontario has declined by 5 per cent since 1994, ranking it sixth behind Nova Scotia, Newfoundland, New Brunswick, British Columbia and Saskatchewan, which have reduced the total amount of waste disposed by 8 per cent to 30 per cent. However, while overall diversion in Ontario is lagging, MOE advised the ECO that the province's waste reduction rate, based on the number of kilograms produced per capita in 1999, was 41 per cent.

## Findings of the ECO Research Project

**Ontario is lagging behind other provinces in achieving its waste diversion targets.**

Ontario is lagging behind other Canadian jurisdictions with respect to waste diversion even though Ontario is the only province in Canada that has passed regulations making diversion and reduction in the IC&I sector mandatory. With the 3R regulations in place, Ontario should be at the leading edge of waste diversion. Moreover, from an economic standpoint, Ontario has the most extensive network of processing and green industries that rely on recyclable "feedstock."

**MOE is not promoting or providing much needed educational material on the 3R regulations.**

When the 3R regulations were brought into force, MOE undertook several educational initiatives, including the production and distribution of guides and pamphlets. In addition, MOE provided more than $200,000 in funding to the Recycling Council of Ontario to provide educational material and operate a telephone hotline. These programs appear to have ended in 1995.

**The majority of residents living in multi-family residential buildings in the province are not given the opportunity to participate in waste diversion activities.**

Thirty per cent of Ontario households reside in multi-family units. According to a report prepared by the Waste Diversion Organization, a not-for-profit project under an MOU with MOE, the capture rate for recyclables in multi-family units is only 25-

50 per cent that of single family households. While O. Reg. 101/94 requires building owners to establish residential source-separation and composting programs, it appears that MOE and municipalities have made little effort to promote compliance with its provisions.

**Large buildings and agencies are not in compliance with the 3R regulations.**
Many large buildings, some containing offices of provincial ministries and agencies, are not source-separating waste as required under the regulations, according to waste collectors.

**MOE is not ensuring compliance with the regulations, and is not monitoring instances of non-compliance.**
In addition to a lack of promotion and monitoring of 3R regulations, there is also a complete absence of enforcement by MOE. It is MOE's position that the 3R regulations were intended to encourage waste diversion by establishing waste diversion practices and infrastructure. Its PRPIR Guideline, set out in MOE's Operational Delivery Strategies (see pages 76-77 for more information), states that, having established the practices and infrastructure, no further compliance activity is needed. Despite widespread non-compliance, there has been only one charge, resulting in a fine of $250, since 1994. To determine whether there were any reports on this issue logged on MOE's Occurrence Reporting Information System (ORIS), the ECO requested information about occurrences logged in the ORIS for MOE's central region between 1999 and early 2001. MOE provided the ECO with two occurrence reports for the time period requested. The ECO subsequently learned that MOE staff are discouraged from logging these types of occurrences on ORIS, despite an MOE policy that stipulates that any complaints received be documented.

**Many waste generators in the IC&I sector are unaware that the 3R regulations exist.**
Businesses and institutions in the IC&I sectors used the impetus of the 3R regulations to establish mechanisms for compliance with the understanding that a level playing field would be established through enforcement of the regulations. But the reduction of MOE's educational activities, lack of enforcement, and substantial decreases in landfill tipping fees meant that recycling activities remained stationary. There is a high degree of non-compliance acknowledged among those involved in waste generation, collection, processing, recycling and disposal. Newer and smaller companies are often unaware of the regulations altogether. (For a specific example, see a description of the A&B Cartage application for review on pages 196-197 of the Supplement to this report.)

**Stakeholders would welcome greater enforcement of the regulations to level the playing field and provide a purer and more reliable recyclable material feedstock.**
The consensus among waste generators, waste processors, recyclers, municipalities, and manufacturers interviewed by the ECO is that lack of compliance is a result of weak recycling markets, lack of education and promotion of the regulations, and

lack of enforcement. The ECO was told that greater enforcement would be welcome to help rejuvenate everyday compliance with the 3R regulations and to promote waste diversion efforts.

**Large quantities of valuable recyclable material are being landfilled.**
Up to 80 per cent of some types of plastics are going to landfills. Large quantities of aluminum beverage cans also continue to be landfilled. One estimate suggests that the rate of disposal at landfills for aluminum packaging increased from 0.01 kg to 1.6 kg per person between 1992-1996. Such a dramatic increase in the amount of aluminum being landfilled is of concern. Although aluminum can be recycled many times with high efficiency, it has high initial costs in both consumption of energy and production of greenhouse gases. As a consequence, landfilling aluminum has a much higher environmental cost than landfilling steel or other materials. Overall lack of diversion of this magnitude means that for some materials there is insufficient and inadequate feedstock to make 3Rs markets viable. Consistent source-separation would provide purer and more consistent amounts of feedstock, which would in turn help to fuel and stabilize the industry and market prices. This would then attract more buyers, leading to a decrease in recycling costs. This is especially true for plastics, since commodities made of recycled plastics greatly increase in value as the feedstock increases in purity.

## Conclusions

According to MOE officials, the ministry lacks the personnel and the financial resources to administer the 3R regulations. However, given the shortage of approved waste disposal capacity in Ontario, it should be considered as an issue that can cause environmental impairment. Moreover, this is not an area where new legislation or regulations need to be drafted to rectify the problem. There are already potentially effective regulations in place that need only to be enforced.

Enforcing the current regulations would help to promote waste diversion and help to meet the provincial goal of 50 per cent waste diversion. For instance, carrying out waste audits and waste reduction workplans will help the IC&I sector to focus on materials that are in need of diversion and will also help companies to identify possible non-disposal markets through their waste diversion efforts.

Enforcement must be coupled with educational campaigns to raise an awareness once again of the requirements and benefits of the 3R regulations. It is apparent that a waste diversion infrastructure has not been established throughout the IC&I sectors.

Although MOE policy mandates that any complaints regarding non-compliance with the 3R regulations be directed to local municipalities, these complaints are supposed to be documented. However, ECO research found there is no central monitoring of complaints, reports or referrals for investigation from district and regional MOE offices. Given the acknowledged widespread lack of compliance, the conclusion must be drawn that complaints are not being logged – or that there is a significant lack of awareness by the public of the existence of the regulations.

**The United States Environmental Protection Agency developed compliance assistance programs in the early 1990s, and these appear to have promoted better regulatory compliance. The ECO believes that MOE should explore whether it would be appropriate to develop "compliance assistance programs" for new small companies.**

*For ministry comments, see pages 199-200.*

## Recommendation 8

**The ECO recommends that:**

- MOE immediately launch an education campaign and work with key stakeholders and industry associations to promote awareness of the 3R regulations.
- MOE begin documenting complaints regarding non-compliance.
- MOE enforce the source-separation requirements for designated operations in the IC&I sectors.

The United States Environmental Protection Agency developed compliance assistance programs in the early 1990s, and these appear to have promoted better regulatory compliance. The ECO believes that MOE should explore whether it would be appropriate to develop "compliance assistance programs" for new small companies.

*For ministry comments, see pages 199-200.*

## Recommendation 8

**The ECO recommends that:**

- MOE immediately launch an education campaign and work with key stakeholders and industry associations to promote awareness of the 3R regulations.
- MOE begin documenting complaints regarding non-compliance.
- MOE enforce the source-separation requirements for designated operations in the IC&I sectors.

# Part 4
## Ministry Environmental Decisions

Each year the Environmental Commissioner of Ontario reviews the environmentally significant decisions made by the provincial ministries prescribed under the *Environmental Bill of Rights*. During the 2000/2001 reporting year, 1,601 decision notices were posted on the Environmental Registry by Ontario ministries. Decision notices were posted for the following:

- 49 policies
- 3 Acts
- 30 regulations
- 1,519 instruments

The extent to which the ECO reviews a ministry decision depends on its environmental significance and the public's interest in the decision. The ECO undertook detailed reviews of the 32 decisions that appear in Section 5 of the Supplement to this annual report. The ECO has also summarized and highlighted the 11 decisions that appear in the following section of this annual report.

This section of the annual report also provides a list of selected proposals for policies, Acts and regulations that were posted on the Registry as proposals prior to March 31, 2000, for which decisions have yet to be posted. The ECO urges the ministries to update the public and the ECO on the status of these proposals.



## Canada-Wide Standards for Particulate Matter and Ozone

The Ministry of the Environment has agreed to adopt the Canada-wide Standards for Particulate Matter and Ozone ratified by the Canadian Council of Ministers of the Environment (CCME) on June 6, 2000. CCME considered these two air pollutants together in the development of this standard, because they are both key ingredients in urban smog.

For the last several years, CCME has shifted its focus away from the development of air quality *objectives*, in favour of developing Canada-wide Standards (CWS) for certain contaminants where "concerted, consistent and timely national action is required." CWS provide not only a numerical target that should ideally be met, but also agreed-upon deadlines and plans for meeting that target across the country. Governments are expected to demonstrate a commitment to attaining the CWS. Components include a timeframe for achieving the CWS, an initial set of actions by each jurisdiction to achieve the CWS, and also a reporting protocol to track progress. However, the ratifying jurisdictions (i.e., the federal government, the provinces and the territories) have a great deal of discretion in how they carry out their roles.

In June 2000, CCME ministers, including Ontario, agreed that the CWS for particulate matter (PM2.5) will be 30 micrograms per cubic metre of air, averaged over 24 hours. The agreed-upon CWS for ground-level ozone will be 65 parts per billion, averaged over eight hours. The target date for achieving both standards is the year 2010. While none of the Canada-wide Standards are legally enforceable, the CWS for PM2.5 and ozone also include a special escape clause, allowing any CCME member to withdraw from the agreement upon three months notice.

The agreement included a special clause for Ontario, stating that if the province met its long-standing target of a 45 per cent reduction of $NO_x$ and VOC emissions (from 1990 levels) by the year 2010 (five years faster than the original target year of 2015), that would be considered Ontario's "appropriate level of effort towards achieving the ozone CWS." $NO_x$ and VOC are emitted from a wide range of transportation and industrial sources and combine in the presence of sunlight to form ground-level ozone. Any remaining ambient ozone levels above the CWS in Ontario would be considered attributable to pollution blown in from the U.S. Ontario stipulated that it would agree to speed up its smog reduction target date by five years only on the condition that the federal government successfully negotiate "equivalent reductions" with the U.S. government during the fall of 2000. This stipulation was included in the decision notice that MOE posted on the Environmental Registry on October 12, 2000. However, on the same day, MOE also issued a news release condemning the federal government for failing to demand any new reductions of smog-causing emissions from the U.S. at the Canada/U.S. Ozone Annex negotiations in Washington. It now appears that MOE does not intend to speed up its smog reduction plans by five years.

CCME ministers also agreed, as part of the CWS for particulate matter and ozone, to a set of initial actions to reduce these pollutants. These initial actions are all to be completed by the year 2005, and include sector-specific emission reduction strategies and improved air quality information for the public. Completing all these "initial actions" by the year 2005 would be an impressive accomplish-

ment, but start-up seems to be slow. It appears that delivery dates for each of the "initial actions" have yet to be established.

The CWS on PM2.5 and ozone includes a commitment to report progress to ministers and the public at five-year intervals, beginning in 2006. Beginning in the year 2011, it is contemplated that each jurisdiction will complete annual standardized "report cards" on achievement of the CWS. But governments have not made any commitments to report on their progress before the year 2006.

MOE provided a 60-day comment period on the proposal to adopt this new CWS on PM2.5 and ozone, and received 13 comments from a range of stakeholders The ministry provided a good summary of the comments in its decision notice, and also responded to some of the concerns raised. In their comments, industry associations raised concerns about uncertainties and gaps in the underlying science, the need for a full cost-benefit analysis, the achievability of the standards, and the heavy burden on Ontario to improve its air quality while handicapped by transboundary emissions from the U.S. On the other hand, environmental organizations and municipalities were concerned that the new CWS for ozone is effectively weaker than the already existing national objective; that no standard was developed for coarser particulates (between 2.5 and 10 microns in diameter); and that Ontario is free to use its own, unenforceable, Anti-Smog Action Plan as a surrogate for meeting the CWS for ozone.

The federal government appears to have some concerns about the adequacy of Ontario's Anti-Smog Action Plan, and has been laying legal groundwork to be able to take a more hands-on role in controlling Ontario air pollution sources. In the summer of 2000, Environment Canada declared particulate matter smaller than 10 microns to be a toxic substance under the *Canadian Environmental Protection Act*, and proposed treating other key smog precursor pollutants the same way, including sulphur dioxide, nitrogen oxides, volatile organic compounds and ammonia. This will mean that the federal government can develop action plans to deal with the reduction of these substances. More recently, on February 19, 2001, the federal government announced a $120 million smog-fighting plan, including negotiations with Ontario and other provinces to reduce emissions from power plants and other industrial sources.

MOE also adopted the CWS for mercury in June 2000 (see pages 69-72 of the Supplement to this report for a full description). In October 2000, when MOE posted decision notices for both of these new CWS on the Registry, it also posted a proposal to adopt CWS for dioxins and furans. No decision notice for the CWS for dioxins and furans had been posted by April 2001.

In addition to having the advantage of setting a numerical value that should ideally be met, and agreed-upon deadlines and action plans for meeting that target value across the country, Canada-wide Standards also establish measuring and reporting protocols for all signing parties. And their development involves more public participation than has been the case for ambient air quality objectives. Moreover, they should provide a more transparent process and a more traceable environmental outcome for Canadians.

New standards for ground level ozone and particulate matter have been badly needed, since abundant evidence has accumulated about their negative health and environmental effects.

Unfortunately, the new CWS for PM2.5 and ozone do not promise a clear, traceable outcome for Ontarians interested in air quality improvements. The federal-provincial negotiations resulted in Ontario's nominally ratifying the new standards, but effectively reverting to its existing Anti-Smog Action Plan, a plan which relies on voluntary measures, has been plagued by poor documentation and reporting, and has demonstrated very slow progress (see page 70). It is not at all clear how an ambient air quality standard can be replaced by a province-wide emission reduction target. It is also not clear how CCME will track the progress of Ontario's Anti-Smog Action Plan, nor how it will evaluate whether the goal has been reached. The issue is further clouded by uncertainty about Ontario's commitment to participate in the list of "Initial Actions" that are a key feature of the new CWS. The ECO will continue to monitor this issue.

*For ministry comments, see page 200.*

## Toughest Environmental Penalties Act

In November 2000, the government proclaimed Bill 124, enacting the *Toughest Environmental Penalties Act, 2000 (TEPA)*. According to the Ministry of the Environment, the purpose of *TEPA* is to strengthen the structure of environmental penalties so that Ontario is equipped to impose tougher administrative penalties on major polluters who break the law. *TEPA* increases the penalties for the following offences under the following statutes:

- *Environmental Protection Act*: for an offence that results in an adverse effect, an offence in respect of hauled liquid industrial waste or hazardous waste if it may result in an adverse effect, and the offence of failing to comply with a stop order.
- *Ontario Water Resources Act*: for an offence that impairs the quality of water and certain offences that relate to water treatment or distribution systems that would also apply to the most serious offences under the Drinking Water Protection Regulation O. Reg. 459/00.
- *Pesticides Act*: for an offence that causes an adverse effect and the offence of failing to comply with a stop order.

Through *TEPA*, the maximum fines for corporations are increased from $1,000,000 to $6,000,000 per day on a first conviction and from $2,000,000 to $10,000,000 per day on a subsequent conviction. The maximum fines for individuals are increased from $100,000 to $4,000,000 per day on a first conviction and from $200,000 to $6,000,000 per day on a subsequent conviction. The maximum period of imprisonment for individuals is increased from two years less a day to five years less a day. Finally, the maximum administrative penalty available is increased from $5,000 to $10,000 per day. Administrative penalties may be imposed by the Director under all three statutes amended by *TEPA* when a person has contravened a provision of an Act or regulation, has failed to comply with an order under the Act, or has failed to comply with a term or condition of a license or permit under the Act.

An increase in the potential fines that can be handed out to corporations and individuals who break environmental laws is an important and positive decision by MOE. The threat of fines at higher lev-

els could well serve as a deterrent for many potential infractions. However, the effectiveness of the legislation depends completely on whether there are enough ministry staff to work with companies on compliance issues and enforce the statute. As well, critics of *TEPA* challenge MOE to refer to any studies or other evidence showing that the previous levels of penalties were inadequate, pointing out that the courts rarely impose the maximum fines already available. These critics question why minimum fines, which are more likely to be imposed by the courts and thus are a more effective deterrent, were not subject to a corresponding increase. The province's poor success rate in collecting environmental fines is also a concern. As of March 31, 2000, the Ministry of the Attorney General reported that over $10 million in environmental fines, accumulated over many years, has remained unpaid.

*TEPA* also makes another important change to all three statutes that MOE failed to mention in their proposal notice on the Environmental Registry. It removes the provisions in each statute that allow an MOE Director to require an officer or director of a corporation to pay an administrative penalty for breaching their "duty of care." Specifically, under the previous provisions, a corporate officer or director could have been liable for failing to take all reasonable care to prevent the corporation from causing or permitting an unlawful discharge of:

- a contaminant into the natural environment (Subsection 182.1(1)(d) *Environmental Protection Act*).
- any material into any waters or shore of waters that may impair the water quality (Subsection 106.1(2)(d) *Ontario Water Resources Act*).
- a pesticide that results in an impairment to the environment; injury or damage to property, plant or animal life; or harm, material discomfort or an adverse effect on the health or safety of any person (Subsection 41.1(1)(d) *Pesticides Act*).

These provisions were initially included in Bill 82, the *Environmental Statute Law Amendment Act, 1998*. However, the provisions had not yet come into force, when they were removed under *TEPA*. This is a significant change to environmental liability. As a result, breaches by corporate officers and directors of their statutory duty of care to prevent contamination by their corporations can be pursued only through prosecution.

The provisions may have been removed because of constitutional considerations under the Canadian *Charter of Rights and Freedoms*, since the provisions allowed an MOE Director to impose penalties on corporate officers and directors without giving them the opportunity to answer to the allegations or present their defence at a trial. Bill 82 was reviewed in the ECO 1998 annual report, where it was pointed out that the Act was posted on the Environmental Registry for only 10 days, rather than for the minimum period of 30 days required by the *Environmental Bill of Rights*. If constitutional problems did exist with the provisions contained in Bill 82, this may be related to the fact that it was developed in such haste, with such an extremely short public comment period. MOE should have posted the proposal for Bill 82 for a longer period and undertaken better consultation on its original proposal before putting the Act in place. Proper use of *EBR* tools can make the environmental decision-making process more effective and less prone to error.

*For ministry comments, see page 201.*

## Regulatory Improvements for Hazardous Waste Management

In October 2000, the Ministry of the Environment finalized a new regulation, Ontario Regulation 558/00, which amended O.Reg. 347, the General Waste Management Regulation under the *Environmental Protection Act*. MOE's stated objective was to strengthen its hazardous waste requirements, which had been relatively unchanged since 1985, to harmonize them with current U.S. regulations.

There are two ways for a waste to be characterized as hazardous:

- if it is included in one of the "Schedules" of hazardous wastes listed in the regulation – usually specific chemicals or a waste produced by a specific industrial process.
- if tests show that the waste is ignitable, corrosive, reactive or "leachate toxic" – that is, likely to leach contaminants into groundwater.

The amendments to O.Reg. 347 changed the criteria for determining which wastes are hazardous. Among those changes:

- a more rigorous leachate toxic test
- new wastes and chemicals added to the Schedules
- a new "derived from" rule that states that treated hazardous waste is still hazardous.

MOE replaced its old leachate toxic testing procedure with the more rigorous and sophisticated Toxicity Characteristic Leachate Procedure (TCLP) used in the U.S. since the late 1980s. TCLP is also going to be adopted by the Canadian federal government to harmonize testing requirements across North America. A waste is characterized as leachate toxic if water leaching through it, according to a specific methodology, contains any contaminants at a concentration equal to or greater than the concentrations given in the TCLP's leachate quality criteria. MOE also increased the number of contaminants in the leachate quality criteria from 31 to 88. The U.S. regulations currently include only 40 contaminants.

The lists of hazardous wastes and chemicals in the Schedules of the Ontario regulation were revised to harmonize with the equivalent lists in the U.S. regulation. Fifty-nine hazardous industrial wastes and 74 chemicals were added to the Schedules, and three chemicals were removed. Some definitions were reworded to reflect changes in the U.S. regulations as a result of U.S. court decisions – for example, to exempt certain types of wastes produced from automobile manufacturing and electroplating activities.

MOE also adopted the U.S. "derived from" rule, which states that any waste derived from a listed hazardous waste is still a hazardous waste, unless specifically exempted. For example, the ash from incinerating hazardous waste would also be considered hazardous. MOE said that the changes will prevent generators and operators from avoiding regulation by minimally processing hazardous wastes and then claiming the resulting material is not hazardous. MOE included provisions to exempt products or processes from this rule if it can be proven that the resultant material is no longer hazardous. Exemptions can be made by "delisting" a waste by regulation or by amending a

site-specific certificate of approval. MOE also exempted four types of wastes that are currently exempted from the rule in the U.S., including certain sludges and residues produced by the iron and steel industry and the electroplating industry, waste from burning some hazardous oil-based materials, and sludge from the treatment of organic wastes such as solvents. MOE exempted these waste types outright, while the U.S. set environmental conditions on the exemptions.

The draft regulation posted on the Environmental Registry contained the earlier requirement that generators of wastes producing leachate with contaminants at levels between 10 and 100 per cent of the criteria must register the waste with MOE. This requirement was removed when the ministry finalized O. Reg. 558/00, so the public did not have an opportunity to comment on this change before it was made.

The ministry carried out a comprehensive public consultation, posting the proposal notice on the Environmental Registry in February 2000, with a 90-day comment period. MOE also held several meetings with many stakeholders. Thirty-six comments were submitted by a range of stakeholders, including industry associations, operators, consultants, other government agencies, non-government agencies, environmental groups and the laboratory sector. The ministry made some changes to address their comments, but did not acknowledge or attempt to resolve some significant concerns raised by a large number of stakeholders.

### O.Reg.558/00 and the Remediation of Contaminated Sites

In its Registry decision notice for the new regulation strengthening hazardous waste requirements, the Ministry of the Environment stated that the "derived from" rule does not apply to wastes generated from decommissioning sites. Some stakeholders, however, are worried that other aspects of the regulation will inhibit the remediation of contaminated sites. The problem is that two separate aspects of the waste regulatory system characterize *in situ* contaminated soils in very different ways, which to the lay public may seem to be contradictory. Soils that can be left in place during a cleanup because they meet the commercial/industrial use standard of the MOE Guideline for Use at Contaminated Sites, may, if excavated, fail the leachate test and be classified as hazardous waste. In such cases, field staff may have to explain to the public why, on a property they have been told is safely decommissioned, a truckload of soil from an excavation has to be placarded and trucked perhaps hundreds of kilometres to be disposed of in a secure landfill site. It is unfortunate that MOE did not resolve this inconsistency between the Contaminated Sites Guideline and the leachate test before finalizing this regulation.

Most industry stakeholders expressed concern about available laboratory capacity and capability, and the time needed to get new approvals. To address these concerns, the ministry decided to allow waste generators and receivers until March 31, 2001, to test their waste streams, submit revised Generator Registration Reports, or to request "de-listing" or amendment of their certificates of approval if necessary. The ministry also added some provisions in the regulation to clarify the conditions under which the "derived from" rule would or would not apply.

## Wastes Now Considered Hazardous Will Increase Substantially

The main result of the amendments is that many wastes previously considered non-hazardous will now be hazardous, and will be

site-specific certificate of approval. MOE also exempted four types of wastes that are currently exempted from the rule in the U.S., including certain sludges and residues produced by the iron and steel industry and the electroplating industry, waste from burning some hazardous oil-based materials, and sludge from the treatment of organic wastes such as solvents. MOE exempted these waste types outright, while the U.S. set environmental conditions on the exemptions.

The draft regulation posted on the Environmental Registry contained the earlier requirement that generators of wastes producing leachate with contaminants at levels between 10 and 100 per cent of the criteria must register the waste with MOE. This requirement was removed when the ministry finalized O. Reg. 558/00, so the public did not have an opportunity to comment on this change before it was made.

The ministry carried out a comprehensive public consultation, posting the proposal notice on the Environmental Registry in February 2000, with a 90-day comment period. MOE also held several meetings with many stakeholders. Thirty-six comments were submitted by a range of stakeholders, including industry associations, operators, consultants, other government agencies, non-government agencies, environmental groups and the laboratory sector. The ministry made some changes to address their comments, but did not acknowledge or attempt to resolve some significant concerns raised by a large number of stakeholders.

### O.Reg.558/00 and the Remediation of Contaminated Sites

In its Registry decision notice for the new regulation strengthening hazardous waste requirements, the Ministry of the Environment stated that the "derived from" rule does not apply to wastes generated from decommissioning sites. Some stakeholders, however, are worried that other aspects of the regulation will inhibit the remediation of contaminated sites. The problem is that two separate aspects of the waste regulatory system characterize *in situ* contaminated soils in very different ways, which to the lay public may seem to be contradictory. Soils that can be left in place during a cleanup because they meet the commercial/industrial use standard of the MOE Guideline for Use at Contaminated Sites, may, if excavated, fail the leachate test and be classified as hazardous waste. In such cases, field staff may have to explain to the public why, on a property they have been told is safely decommissioned, a truckload of soil from an excavation has to be placarded and trucked perhaps hundreds of kilometres to be disposed of in a secure landfill site. It is unfortunate that MOE did not resolve this inconsistency between the Contaminated Sites Guideline and the leachate test before finalizing this regulation.

Most industry stakeholders expressed concern about available laboratory capacity and capability, and the time needed to get new approvals. To address these concerns, the ministry decided to allow waste generators and receivers until March 31, 2001, to test their waste streams, submit revised Generator Registration Reports, or to request "de-listing" or amendment of their certificates of approval if necessary. The ministry also added some provisions in the regulation to clarify the conditions under which the "derived from" rule would or would not apply.

## Wastes Now Considered Hazardous Will Increase Substantially

The main result of the amendments is that many wastes previously considered non-hazardous will now be hazardous, and will be

subject to the requirements of O.Reg. 347 for handling and disposing of "subject wastes." This regulation does not alter any of the existing requirements for handling or disposal of subject wastes, which include hazardous and liquid industrial wastes. As before, they must be registered with MOE and tracked if moved from their point of generation to another site for treatment or disposal, and can be disposed of only at sites licensed to receive hazardous wastes.

MOE could not quantify the expected increase in the amount of hazardous waste. In the proposal notice on the Environmental Registry, the ministry did say that when the TCLP replaced the old leachate toxic test in the U.S., the quantity of hazardous wastes doubled. The addition of the "derived from" rule and the addition of new types of waste to the listed hazardous wastes will also increase the amount of waste considered hazardous.

The ministry did not respond to concerns raised about how it would manage the anticipated increase in demand for hazardous waste treatment, recyling and disposal. Currently the Safety-Kleen facility near Sarnia is the only commercial landfill and incinerator licensed in Ontario to receive most types of hazardous wastes. Many stakeholders raised concerns about increasing disposal at Safety-Kleen, for both environmental and economic reasons. In December 2000, MOE estimated that the landfill had about five years' capacity left, but an increase in landfilling as a result of this regulation will shorten its life further. In anticipation of the increased demand resulting from this regulation, in November 2000, Safety-Kleen submitted an application for approval to increase the volume of hazardous waste it can incinerate.

Public concern about the facility has been increasing, and during this reporting period, two *EBR* applications for review had already been submitted, requesting that MOE review the existing certificates of approval already issued to Safety-Kleen for the incinerator and landfill. (The ECO review of the ministry's handling of those applications is found on pages 139-143, and detailed reviews are found in the Supplement to this annual report.)

The new regulation, O.Reg.558/000, has significant economic impacts for industry, with increased costs for testing and for disposal of wastes now considered hazardous instead of non-hazardous. The new TCLP test is far more expensive than the old test, and it is still unclear whether or not all waste has to be tested for the full suite of parameters. Statements by the minister and in the Registry decision notice suggest that wastes must be tested for all 88 contaminants. However, ministry staff have advised industry that it is up to generators and operators to decide how many contaminants to test for. Industry has commented that, unlike the U.S., liability for environmental harm transfers to the receivers of the wastes in Ontario and thus most receiving landfills will likely require that generators prove they have tested for all leachate toxic criteria.

### ECO Comment

Harmonizing Ontario's waste regulation with U.S. rules to ensure that wastes considered hazardous in the U.S. are also considered hazardous in Ontario is a positive move. This decision will help protect the environment surrounding non-hazardous landfills across the province, by lessening the risk of leaching of toxic wastes into ground and surface water from landfills that were not designed to contain hazardous wastes. It may also encourage generators of the wastes now considered haz-

ardous in Ontario to undertake pollution prevention measures to reduce their generation at the source, to avoid the expense of disposal as hazardous wastes.

The environmental benefit of the "derived from" rule is weakened somewhat because MOE adopted the U.S. EPA's exemptions outright without the conditions and additional requirements contained in the U.S. EPA regulations. Several stakeholders noted that the exemptions from the "derived from" rule would have a very different effect in Ontario than in the U.S. The U.S. exemptions for some of the materials are conditional on the wastes meeting limits on acceptable levels of contaminants, and require proponents to notify the public and the EPA. The Ontario regulation does not refer to any limits on contaminants, or other specifications or conditions.

A number of comments warned that the changes would not achieve the ministry's stated objectives of strengthening hazardous waste requirements. Even though Ontario will now use the same lists and criteria to identify hazardous wastes, the standards for treatment and disposal remain far less stringent than those of the U.S. The U.S. listings of hazardous wastes are accompanied by Universal Treatment Standards (UTS) for each type of waste as part of the Land Disposal Restrictions introduced in 1994, which ensures that classified hazardous wastes meet stringent limits for contaminants before they can be buried in a landfill or otherwise applied to land. Environment Canada commented that without adopting the UTS, "the amount of waste coming into Ontario from the U.S. would not be affected by the adoption of the ..lists alone" and that "adoption of the UTS is an essential complementary component to the hazard characterization for waste." MOE did not acknowledge or respond to these concerns in its decision on this regulation, and no other review has been announced.

MOE claims in news releases and speeches that Ontario's waste management regulation is now consistent with the current rules set by the U.S. EPA. This is true only for the classification and identification of hazardous waste, not for its treatment or disposal. Ministry news releases and speeches have implied that the changes would control rising imports of hazardous wastes from the U.S. But this ignores the reasons why disposal remains much cheaper in Ontario than in the U.S. Had MOE's changes to the classification of hazardous wastes been accompanied by the stronger U.S. standards for their disposal, the improvement to environmental protection in Ontario would have been much greater.

MOE still needs to address the larger issues raised during the public consultation on this proposal:

- the diminishing capacity to treat and dispose of hazardous waste in Ontario
- ongoing concerns with the Safety-Kleen facility
- the need to ensure that the new rules are compatible with other goals such as cleanup of contaminated sites.

Also, MOE still needs to focus more attention on encouraging pollution prevention. The ECO encourages the ministry to continue to review the need for tighter standards for the treatment and disposal of hazardous wastes. (See pages 44-47 and 139-143 of this annual report for more discussion of hazardous waste management.)

*For ministry comments, see pages 201-202.*

## Emission Reporting Regulation for Electricity Generators

In April 2000, the Ministry of the Environment introduced a new regulation under the *Environmental Protection Act* requiring the electricity sector to monitor and report its air emissions. Ontario Reg. 227/00 was in effect only between May 1, 2000, and May 1, 2001, when it was revoked. The regulation that replaced it, O. Reg. 127/01, applies to all industrial sectors, including the electricity sector.

O. Reg 127/01 will be reviewed by the ECO for the 2001/2002 annual report, and only those aspects of this new regulation that changed the requirements previously set out for the electricity sector will be described in this annual report.

Under the revoked O. Reg 227/00, any generation facility with a capacity over one megawatt (MW), and selling more than 10 per cent of its electricity to the market, had to monitor and report its air emissions. One MW meets the power needs of 100 average homes during peak hours, and thus the regulation captured both Ontario Power Generation (OPG) and private sector electricity generators. The regulation required that generators monitor their emissions for 28 contaminants and report any emissions over the "reporting thresholds" for both the calendar year and smog season. Information about the facility, the type of fuel used, and the amount of electricity generated during the previous calendar year was also to be included in the reports, which were to be submitted to the ministry and made available to the public by June 1 of each year. The first annual reports from all generators were due June 1, 2001.

MOE allowed several different methods for monitoring or estimating a facility's emissions, including use of continuous emission monitors (CEMs), stack testing, and mathematical models for predicting emissions. The regulation required continuous monitoring with CEMs for facilities with a capacity over 25 MW emitting $NO_x$ or $SO_2$ above the reporting thresholds. This would include OPG facilities and also many private sector facilities. Facilities without CEMs already installed were given one year, until May 1, 2001, to install the equipment.

Public consultation on the development of O. Reg. 227/00 was far from adequate. The ministry appeared to rush to finalize the regulation before important issues had been resolved. The 30-day comment period on the draft regulation posted on the Environmental Registry in January 2000 was too short for such a complex regulation. Also, the ministry held its stakeholders' workshop on the last day of the comment period. The ministry did make several significant changes to the proposed regulation to address stakeholders' concerns, mostly to simplify the requirements for monitoring and reporting. The ministry should have reposted the draft regulation for public comment, given the significant changes it made to the original proposal and the still-unresolved concerns.

O. Reg 227/00 resulted in a year of confusion for industry, and delayed implementation. The regulation was proposed in January 2000, finalized in April 2000, and generators were supposed to start monitoring on May 1, 2000. But for the next few months the ministry held meetings and set up an industry/ministry working group to resolve issues in the development of the all-sector regulation that MOE had said would replace the electricity sector regulation by January 1, 2001. The electricity

generators did not install the CEMs required by O. Reg. 227/00 because they knew through their consultations with the ministry that the requirement was going to be revoked.

A proposal for the all-sector regulation was posted on the Registry briefly in August, but removed again, and then reposted in November with a 30-day comment period. On December 28, 2000, just days before the new regulation was supposed to take effect, MOE revised the Registry notice to say its target date of January 1, 2001, was not going to be met. In the meantime, almost a year after O. Reg. 227/00 took effect, industry was still uncertain about how to implement its requirements, and the ministry had not yet finalized the reporting forms nor worked out other important details. As late as April 2001, electricity generators were still writing the ministry asking for clarification on whether they were subject to the requirements of O. Reg. 227/00, and when the new regulation would be finalized.

The ministry finalized the all-sector regulation in late April 2001. Most aspects of O.Reg 227/00 were carried over unchanged, but O. Reg. 127/01 contains a few significant changes to the requirements for the electricity sector, including:

- expansion of the list of substances to be monitored from 28 to 358
- removal of the requirement for CEMs

MOE has retreated from the requirement that larger facilities continuously monitor their emissions with CEMs, and will instead allow facilities to use any method to estimate emissions.

According to MOE, the electricity sector regulation would provide "significant emission reductions," since the public's right-to-know will be an incentive for companies to reduce emissions. The regulation does not itself require emission reductions. In order to achieve this goal, the ministry would have to apply the data collected to the development of new regulations or programs that do require real emission reductions. Furthermore, if the environmental benefits of the program are expected to come from the pressure applied by public scrutiny, MOE must ensure the public, including electricity consumers, can readily access and understand the data.

MOE also stated that the production of cost-effective clean energy would be promoted through market forces under the Ministry of Energy, Science and Technology's consumer disclosure program. This assumes that market forces and consumer choice in an open electricity market will result in the production of cleaner energy, because environmentally conscious consumers will pay more for green energy. However, it has yet to be seen whether this approach will work. And it will be several years, if at all, until the information reported by the electricity sector will be used in the consumer disclosure program.

MOE said, however, that the data collected from electricity generators will be used to help implement the proposed "cap and trade" program, which the government intends to finalize before the electricity market is opened up to competition. MOE posted the proposal for a regulation setting emission limits and an emission credit trading system for two substances, $NO_x$ and $SO_2$, in January 2000, at the same time that the ministry posted the proposal for O. Reg. 227/00 on the Registry.

The "cap and trade" program has proven to be a very complex and controversial proposal. In March 2001, the ministry posted a revised proposal for a regulation on emission limits and a discussion paper on the trading system for further public consultation. The official opening of the electricity market has been delayed several times, and as of April 2001, is expected to open, at the earliest, in May 2002. The ECO will continue to monitor progress on these related initiatives.

The ministry also said it intends to use the information collected to track progress in air programs such as the Anti-Smog Action Plan, Post-2000 Acid Rain Strategy, Climate Change and Air Toxics, and to assist future policy development. The ECO agrees that measuring progress is important, and has noted serious problems with the reporting of emission reductions against targets under the Ontario's Anti-Smog Action Plan (see page 70 of the annual report for further discussion of this topic), and increasing delays in the publishing of Ontario-wide Air Quality Reports. These reporting and transparency problems undermine public confidence in MOE.

When it first proposed the monitoring and reporting regulations, MOE said that the reporting requirements would be integrated with the National Pollutant Registry Information requirements as much as possible. Most stakeholders pointed out that this would be extremely difficult, because the reporting systems are fundamentally different. In May 2001, MOE said it had initiated a three-year pilot project with Environment Canada to work toward further integration of the emission reporting programs.

## ECO Comment

The ECO, environmental groups and other government agencies strongly support the establishment of mandatory reporting for air pollutants and greenhouse gas emissions. One concern, however, is that the monitoring and reporting framework may not provide consistent, comparable measurements of emissions, since it allows each facility to choose a different methodology to estimate its emissions. Another concern is that the ministry has said "sources are accountable for their own data quality and integrity." To maintain public confidence the ministry should enforce the reporting requirements, and periodically verify data, inspect the records kept on-site, review and analyze the reports.

In the 1998 annual report, the ECO recommended creation of an emissions inventory for all electricity generators. The ECO commends MOE for taking key steps towards fulfilling that recommendation. However, the ECO also recommended then that MOE analyze the data on emissions from electricity generators to determine air pollution trends and release an annual report based on this analysis. MOE does not appear to be implementing that recommendation. The ministry has said it intends in the future to set up a Web site where the public can access the annual and quarterly reports from the electricity generators, but it does not intend to provide any analysis or interpretation. In order to achieve its stated purposes, MOE should summarize, analyze and interpret the data for the public in these reports.

*(For a more detailed review of these issues, see the Supplement to this annual report.)*

*For ministry comments, see page 202.*

# Drinking Water Protection Regulation

In August 2000, the Drinking Water Protection Regulation, O. Reg. 459/00, came into effect under the *Ontario Water Resources Act (OWRA)*. The regulation is part of "Operation Clean Water" – a collection of separate provincial initiatives aimed at improving water quality and protecting public safety. (The Ministry of the Environment's decision regarding this regulation has been reviewed by the ECO and can be found at pages 44-51 of the Supplement to this report.)

The catalyst for Operation Clean Water was the Walkerton tragedy, in which the town's drinking water became contaminated by *E. coli* 0157:H7 in the spring of 2000, leading to widespread illness and the death of seven Walkerton inhabitants. *E. coli* is a fecal coliform bacterium that indicates contamination by sewage or animal manure (the 0157:H7 strain is unusually toxic).

Prior to this new regulation, drinking water quality in Ontario was governed by procedural guidelines and voluntary standards under the Ontario Drinking Water Objectives.

O. Reg. 459/00 brought a needed change to this previous regime of guidelines and standards. The regulation creates the first mandatory parameters and procedures for drinking water treatment and testing in Ontario. It provides the people of Ontario with the right to a minimum level of treatment of drinking water and requires constant monitoring of water quality and water systems. It also requires that testing be done at accredited laboratories and creates a mandatory procedure for reporting poor drinking water quality to MOE and the public on a timely basis.

The new regulation applies to large water treatment and distribution systems that require approval under *OWRA*. These facilities include municipal water works and other large water treatment systems that:

- use more than 50,000 litres of water on any day or have the capacity to supply 250,000 or more litres of water per day. This would include municipalities, large hospitals, resorts, and large restaurants
- serve six or more residences. This would include everything from small private systems to large municipal systems serving hundreds of thousands of people.

It does not apply to small drinking water facilities that are not capable of supplying water at a rate greater than 250,000 litres per day or facilities that supply less than 50,000 litres of water on at least 88 days of a 90-day period (unless they serve six or more private residences). The policy and regulation for testing and reporting requirements for Ontario's small waterworks are currently under review by MOE and are the subject of a proposal notice on the Environmental Registry (# PA00E0027).

The new regulation outlines a number of requirements aimed at protecting and monitoring water quality. It sets out a minimum level of treatment for all water that is specific to the source of the water. All groundwater must at least be chlorinated, and surface water must at least be chlorinated and receive additional treatment by chemically assisted filtration. However, the regulation also provides that the water can be treated with alternate methods, provided that, in the opinion of the

MOE Director, it provides water of equal or better quality.

Requirements in the regulation outline the testing and analysis procedures that a facility must follow, and differ according to the sources of the water. The regulation sets out maximum allowable concentrations for named substances that the water may contain, as well as standards for microbiological organisms, turbidity, chlorine residual, fluoride, volatile organics, inorganics, sodium, nitrates/nitrites, pesticides, and PCB concentrations. In addition, the regulation sets out operational parameters, chemical/physical standards, radiological standards, and indicators of adverse quality and corrective action for them.

**Examples of small waterworks that may not be subject to O. Reg. 459/00**

Small Schools
Small Hospitals
Long-term Care Facilities
Day Nurseries
Boarding Houses
Gas Stations
Stores
Inns
Bed and Breakfasts
Rental Cottages
Small/medium-sized Restaurants
Camps
Churches
Ball Parks and Stadiums
Theatres
Assembly Halls
Country Clubs
Campgrounds
Motels

The regulation requires that the testing and analysis must, with some exceptions, be carried out by a laboratory that is accredited for each parameter or standard (the accreditation must be obtained from the Standards Council of Canada or an equivalent body). O. Reg. 459/00 also places a number of reporting obligations on the owners of the water treatment facilities. Owners must submit quarterly reports to MOE that describe the operation of the water system, outline the measures taken to comply with the regulation, and summarize the analytical results obtained for required samples taken during the quarter. The owner is also responsible for submitting engineers' reports every three years if a municipality or the Ontario Clean Water Agency owns or operates the system or obtains their water from the system. Finally, each time a new laboratory is first used for testing, an owner must identify the laboratory in a written notice to the MOE Director.

The owner of the water treatment facility and the laboratory are both obliged to give notice when they find that one of their water samples exceeds chemical/physical or radiological standards, or an indication of adverse water quality such as *E. coli*. Notice must be given immediately to MOE's Spills Action Centre and the local Medical Officer of Health. The owner of the facility must then analyze another sample, apply any corrective action specified by the regulation, and a warning notice must be posted in a prominent location.

The owner of the water facility must make laboratory reports, testing results, approvals, orders, quarterly reports, O. Reg. 459/00, and the Ontario Drinking Water Standards available to the public at no charge. All owners of large waterworks also have a duty to produce free quarterly reports to inform the public about their drinking water.

MOE Director, it provides water of equal or better quality.

Requirements in the regulation outline the testing and analysis procedures that a facility must follow, and differ according to the sources of the water. The regulation sets out maximum allowable concentrations for named substances that the water may contain, as well as standards for microbiological organisms, turbidity, chlorine residual, fluoride, volatile organics, inorganics, sodium, nitrates/nitrites, pesticides, and PCB concentrations. In addition, the regulation sets out operational parameters, chemical/physical standards, radiological standards, and indicators of adverse quality and corrective action for them.

**Examples of small waterworks that may not be subject to O. Reg. 459/00**

Small Schools
Small Hospitals
Long-term Care Facilities
Day Nurseries
Boarding Houses
Gas Stations
Stores
Inns
Bed and Breakfasts
Rental Cottages
Small/medium-sized Restaurants
Camps
Churches
Ball Parks and Stadiums
Theatres
Assembly Halls
Country Clubs
Campgrounds
Motels

The regulation requires that the testing and analysis must, with some exceptions, be carried out by a laboratory that is accredited for each parameter or standard (the accreditation must be obtained from the Standards Council of Canada or an equivalent body). O. Reg. 459/00 also places a number of reporting obligations on the owners of the water treatment facilities. Owners must submit quarterly reports to MOE that describe the operation of the water system, outline the measures taken to comply with the regulation, and summarize the analytical results obtained for required samples taken during the quarter. The owner is also responsible for submitting engineers' reports every three years if a municipality or the Ontario Clean Water Agency owns or operates the system or obtains their water from the system. Finally, each time a new laboratory is first used for testing, an owner must identify the laboratory in a written notice to the MOE Director.

The owner of the water treatment facility and the laboratory are both obliged to give notice when they find that one of their water samples exceeds chemical/physical or radiological standards, or an indication of adverse water quality such as *E. coli*. Notice must be given immediately to MOE's Spills Action Centre and the local Medical Officer of Health. The owner of the facility must then analyze another sample, apply any corrective action specified by the regulation, and a warning notice must be posted in a prominent location.

The owner of the water facility must make laboratory reports, testing results, approvals, orders, quarterly reports, O. Reg. 459/00, and the Ontario Drinking Water Standards available to the public at no charge. All owners of large waterworks also have a duty to produce free quarterly reports to inform the public about their drinking water.

MOE has now compiled the Adverse Water Quality Incident Reports on the ministry's Web site. The reports are supplied by water treatment facility owners if local water supplies show adverse results such as *E. coli* or require boil water advisories.

### Critics say O.Reg. 459/00 falls short

The issues raised by this regulation have social, economic and environmental implications for the water treatment industry, municipalities and the people of Ontario. It aims for consistent water quality throughout the province and provides a standard procedure for owners of waterworks and laboratories to follow if there's a concern regarding water safety. This ensures that MOE and the public are informed of the possible danger as soon as possible.

However, some critics are skeptical about the effectiveness of the regulation, citing the following concerns:

- The regulation does not create a clear statutory right to clean and safe drinking water.
- It doesn't address the causes of drinking water contamination.
- It doesn't have any provisions that allow citizens to enforce the regulation themselves or privately prosecute violators of the regulation.

An *EBR* application for review submitted to MOE on the need for a Safe Drinking Water Act in Ontario raised issues similar to those above. MOE denied the application. (The ECO review of MOE's handling of this application is on pages 44-51 of the Supplement to this report.)

### ECO Comment

Drinking water quality is a critical and ongoing issue for all citizens of Ontario. The Walkerton tragedy has brought the issue to the forefront and this new regulation is a very good start by MOE. The regulation does respond to some of the specific issues that were raised in the wake of Walkerton and may prove to be effective to a limited extent. However, unresolved issues remain. While the regulation makes the treatment and disinfection of drinking water mandatory and provides that the particular treatment could be one that the MOE Director finds is equally effective to chemically assisted filtration and chlorination, the regulation does not specify which methods of alternate treatment are acceptable.

This is an extremely significant omission. While the ECO understands that the regulation had to be developed quickly due to the circumstances, MOE should have since provided an interpretation defining alternate acceptable treatment technologies. MOE's failure to do this may essentially stifle the development of new equivalent technologies that could provide equally effective treatment. MOE should rather, where necessary, be supporting research to help stimulate the development of new technologies. Acceptable forms of treatment also need to be defined in order to give communities options for treating their water. The chemically assisted filtration systems that are required to treat all surface water are very expensive to implement. It would be extremely helpful for smaller communities in particular to be informed of less expensive, equivalent alternatives from which they can choose.

Another issue that should be addressed more fully in the regulation is the monitoring of smaller water systems that fall just under the authority of the regulation. There have been problems in the past with the failure of these smaller systems to obtain a certificate of approval as required under the *OWRA*. MOE should address how these systems will be monitored and outline what is being done to ensure they have obtained the proper approvals.

The ECO will continue to monitor the application of all aspects of MOE's new Drinking Water Protection Regulation.

*For ministry comments, see page 203.*

## Presqu'ile Provincial Park Management Plan

Each year Presqu'ile Provincial Park is visited by approximately 250,000 people seeking outdoor recreation opportunities. Located within the Municipality of Brighton on the shores of Lake Ontario, Presqu'ile is a popular site for naturalists, birdwatchers, photographers, campers and day-users interested in observing bird and plant life in particular. The park's natural features attract large migrant bird and butterfly populations and provide a unique and favourable habitat for tens of thousands of waterfowl, making it a popular location for waterfowl sport hunting as well.

Park management must balance the competing values of human recreation and natural heritage protection. The Ministry of Natural Resources has been trying to develop a Park Management Plan (PMP) for Presqu'ile for over 20 years. Intended to guide the development, management and operation of the park for the next 20 years, the PMP was completed and approved in October 2000 by Ontario Parks, a division of MNR.

Perhaps the most contentious policy in the PMP is Ontario Parks' decision to phase out waterfowl hunting over a five-year period, provided that MNR, working in partnership with conservation organizations, develops alternative hunting opportunities for duck hunting. This and other changes proposed within the PMP sparked opposition from sport hunting groups such as the Ontario Federation of Anglers and Hunters (OFAH). The Federation has expressed concern that Ontario Parks is adopting an agenda that is biased against angling, boating and waterfowl hunting in the park, which OFAH says does not recognize the cultural heritage values associated with these activities. Several "bump-up" requests, reflecting a range of concerns, have been submitted to the Ministry of the Environment requesting a full environmental assessment under the provisions of the *Environmental Assessment Act*.

The ECO commends MNR's use of the Environmental Registry for informing and involving the public at many stages throughout the planning process. However, MNR did not adequately discuss, in the PMP, the decision notice or other provided documents, the social, economic and scientific reasons for phasing out waterfowl hunting within the Park boundaries. This issue highlights the continuing competition between the values of recreation versus natural heritage protection, a debate endemic to the Ontario Parks System.

MNR adequately incorporated public comment into the approved PMP and has revised some of the original proposals in light of public input. Nevertheless, hunters, anglers and boaters were critical of the final version and criticized its natural heritage protection policies for the lack of recognition of the cultural heritage of these recreational activities in Presqu'ile's history. Similarly, the naturalists criticized the PMP for not eliminating the waterfowl hunt entirely after finding an alternative area, rather than allowing it to continue for five more years.

While the planning process that resulted in the approved Park Management Plan officially began in 1995, attempts at management planning for the park have been ongoing for more than 20 years. The ministry has worked very hard to balance natural heritage protection with recreational pursuits within the Park. The ECO will watch with interest to see if this balance can be successfully achieved and implemented.

*For ministry comments, see page 203.*

## New Fishing Regulations for the Northwest Region

In November 1997, the Ministry of Natural Resources posted proposed changes on the Environmental Registry to the Ontario Fishing Regulations (OFR) of the federal *Fisheries Act*, which is administered by the Department of Fisheries and Oceans (DFO). Certain provisions of the *Fisheries Act* allow the DFO to delegate to the Ontario Minister of Natural Resources the power to vary (by issuing a "variance order") the regulations that set out fishing seasons, fishing quotas, and limits on the size or weight of a particular fish.

The changes to the OFR apply to a broad area of northwestern Ontario, known as the Northwest Region, spanning from Lake Nipigon east to the Manitoba and U.S. borders. With approximately 75,000 lakes larger than 10 hectares, the area has some of the best quality fisheries in Ontario and some of the best fishing opportunities in North America.

MNR explained that the purpose of the proposed changes to the Ontario Fishing Regulations was to simplify, streamline and modernize sportfishing regulations in order to maintain high-quality and sustainable fisheries in the area. Specifically, the objectives were to reduce the harvest of a number of species of fish; improve the conservation, diversity and sustainability of fisheries resources; and increase the social and economic benefits arising from these fisheries.

The process of developing the changes began in September 1997, when representatives from the Ontario Federation of Anglers and Hunters, the Northern Ontario Tourism Organization, and the Ministry of Natural Resources formed the Northwest Region Fisheries Committee. The Committee developed recommendations for consideration by both MNR and DFO that would conserve and enhance the fisheries resources. Committee members also discussed the need for educational programs that would inform the anglers and thus enhance the success of the recommendations.

Some changes were made to the OFR based on the Committee's recommendations. They reduce the number of sportfish that anglers can catch and possess daily: the highly valued and sought-after

walleye, sauger, northern pike, smallmouth bass, largemouth bass, lake trout, muskellunge, yellow perch and black crappie. They also restrict the size of these fish that may be possessed. In some cases the restrictions change based on the season, in order to protect fish during vulnerable periods and to protect mature breeding stock prior to their spawning season. Size restrictions were put in place to protect broad stockfish, but still allow anglers to take one trophy fish home.

Other suggested changes were not adopted by MNR – for instance, the recommendation that all revenues generated from the sale of Crown land camping permits be allocated to the Fish and Wildlife Special Purpose Account for fisheries management. Instead, all revenues from Crown land camping permits continue to go into the Consolidated Revenue Fund, the province's general revenue account.

To encourage non-Canadians to stay overnight in Canada, the Committee proposed that non-residents who wish to keep the fish they catch must stay overnight at a provincial park or tourist facility, or they must own property or be an immediate relative of an Ontario property owner. Non-residents who failed to follow these requirements should be required to practise "catch and release" fishing only. These recommendations were not adopted.

MNR did pass O.Reg. 323/99, under the *Fish and Wildlife Conservation Act (FWCA)*, limiting the number of fish a non-resident can keep. The *FWCA* is prescribed under the *Environmental Bill of Rights*, and any environmentally significant regulations passed under it are placed on the Registry for a 30-day public comment period. However, variation orders are not prescribed under the *EBR*, since they vary the OFR under the federal *Fisheries Act*. Nevertheless, MNR did post these changes on the Registry in an effort to canvass comments from various interests and to inform the public fully about the amendments.

These changes to fishing regulations in the Northwest Region were developed after extensive consultation with the angling public in the area. When the proposed changes were first posted on the Environmental Registry, MNR received 751 individual comments, questionnaires, petitions, and responses from community organizations. At the time of the second notice, MNR also published advertisements in newspapers in the region, inviting comments from the public and sending out questionnaires. In this second phase of consultation, 749 responses were received.

By providing management strategies for these sportfish species, MNR appears to have responded appropriately to recognized signs of over-fishing. By establishing a Committee with representatives from the Ontario Federation of Anglers and Hunters and the Northern Ontario Tourism Organization, MNR also took proactive steps to ensure that the restrictions would be followed and supported by the affected industries and interests.

The ECO believes that these changes to the OFR serve some of the specific purposes of the *EBR*, including protecting and conserving fish populations, and providing sustainability by reducing fish harvests to within allowable limits. The changes to the OFR allow the fisheries to keep up with the increasing number of anglers and the new technologies that allow anglers to catch fish faster and in greater numbers. To assess the success of these changes over time, MNR has also provided for planned monitoring of fish populations.

The ECO commends MNR for posting these changes on the Environmental Registry and for recognizing the importance of receiving public comment, although it was not technically required in this situation. While MNR should commit to reporting the results of its monitoring work on a regular basis, the ministry should also be commended for its extra efforts in undertaking two phases of public consultation and for using the Registry to republish the proposal and encourage further public input.

*For ministry comments, see page 204.*

## Marshfield Woods

In March 2001, the Ministry of Municipal Affairs and Housing denied approval of a proposal to build a golf course in an important natural area in Essex County – the Marshfield Woods.

A proposed Official Plan Amendment (OPA) would have redesignated approximately 79 hectares of land from "Agricultural" to a new designation called "Natural Environment/Golf Course," to permit the development of a golf course. The Council of the Town of Essex had adopted the proposed OPA in November 2000, and then applied to MMAH for approval.

MMAH said in its decision notice posted on the Registry that it denied approval because the proposal did not have appropriate regard to the policies of the Provincial Policy Statement (PPS), and that the proposed golf course would be located within a Provincially Significant Wetland (PSW). No further information about its reasons was provided by the ministry in its decision notice, but MMAH provided its written explanation for the refusal to the ECO upon request. In that document, MMAH indicated the ministry denied the application because it did not have appropriate regard to a number of the PPS policies, including those related to significant woodlands, significant wildlife habitat, and the diversity of natural features and connections.

The PPS sets out matters of provincial interest that planning authorities such as municipalities, MMAH and the Ontario Municipal Board (OMB) must "have regard to" when making decisions under the *Planning Act*. Section 2.3 of the PPS states that natural heritage features and areas will be protected from incompatible development. It says that:

- development and site alteration will not be permitted in significant wetlands south and east of the Canadian Shield (wetlands designated as PSW by MNR).
- development and site alteration may be permitted in other types of significant natural heritage areas, such as woodlands, wildlife habitat and areas of natural and scientific interest (ANSIs), if it has been demonstrated that there will be no negative impacts on the natural features or the ecological functions for which the area is identified.

The lands subject to the development proposal cover a large portion of the Marshfield Woods, located just north of Harrow. It is one of the largest remaining natural areas of its kind in southwestern Ontario. MNR says that the site is located in the extreme southwestern portion of Ontario in the Carolinian Canada zone, an area which has lost over 90 per cent of its wetlands and contains only 3

per cent forest. The environmental significance of Marshfield Woods has been recognized for many years, but it was first formally designated as an Environmentally Significant Area by the Essex Region Conservation Authority (ERCA) in 1994. The Ministry of Natural Resources identified Marshfield Woods as a Provincially Significant Wetland in May 2000.

MNR's comments on the proposal concluded that development of a golf course on the site would result in:

- the loss of 47 hectares of provincially significant wetland
- the loss of more than 47 hectares of interior forest bird habitat
- an impact on, or the loss of, up to 12 provincially significant plant species, three locally significant plant species and two provincially significant animal species
- an impact on hydrological functions.

An earlier application for a golf course on the property was initiated in 1998 by the landowner, the Hearn Group. Construction activities, including logging of trees for the fairways, began in early 2000, even though the landowner did not have approval to build a golf course. The OMB was asked by objectors to halt the logging until a decision was made on the golf course application. The Board said its hands were tied, because there were no legal means to prevent tree-clearing on agricultural lands, and stopping it "would be infringing on the Hearn Group's property rights." After the PSW designation was made by MNR in May 2000, the first application was withdrawn.

In August 2000, the proponent submitted a new application to the Town of Essex. Town Council said that they had no choice but to approve the proposed golf course, because the Hearn Group had threatened to cut every last tree if denied approval. The town's decision was sent to MMAH for approval in November 2000. MMAH circulated the application to several ministries and the ERCA for comment, and posted it on the Registry for public comment.

The ministry's description of the proposal and the decision in the Registry notices were lacking in detail, but the ministry did provide a contact name and phone number so that the public could request more information. The ministry contact person was very cooperative with requests for information from the public and the ECO. MMAH posted the decision notice immediately after the decision was made to notify the public of the appeal period under the *Planning Act*. The main weakness of MMAH's decision notice is that it did not provide a description of the public comments and their effect on the decision as required by the *EBR*. The decision notice simply stated that 76 comments were received and that "All comments were reviewed and considered."

ECO's review of the public comments found there was no middle ground expressed. All comments were either strongly supportive or strongly opposed to the proposal. Most opposed the OPA proposal on environmental grounds. Some supported the proposal, primarily because of the issue of property rights. Those opposed to the OPA described the environmental significance of the Marshfield Woods and asked that it be protected. They stressed that Essex County has 3 per cent tree cover, but more than 20 golf courses. They referred to the PPS policies regarding provincially significant wetlands, significant woodlands, significant wildlife habitat, diversity and connectivity, and the quality and quantity of groundwater, surface water and recharge areas.

Many commenters alleged that the Town of Essex failed to have regard to the PPS and the advice of experts such as staff of the ERCA and MNR. They also stated that the town did not carry out adequate public consultation. MMAH confirmed that Essex did not consult with the ministry as required by the *Planning Act* prior to the adoption of the OPA, and that advice provided by MNR and MMAH to Town Council was not followed. The commenters also raised the concern that this OPA was just the first stage of a larger project contemplated by the Hearn Group and another developer to expand the golf course and build estate housing on a large area of contiguous forest and surrounding agricultural lands.

Commenters supporting the proposed OPA were not all necessarily in favour of the proposed golf course, but were strongly opposed to the idea of designating privately owned lands as environmentally sensitive. They argued that property rights should be paramount, and if any level of government were going to remove landowners' rights to develop their lands, that the landowners should be compensated. This was an issue in the area at the time, because Essex County (the upper-tier municipality) was also carrying out consultation on its draft Official Plan and its proposal to designate some lands as Environmentally Significant Areas.

The comments contained opposing views on a number of topics:

- how environmentally significant Marshfield Woods is
- whether the town had carried out adequate public consultation on their consideration of the application
- whether provincial interests such as natural heritage should take precedence over a Town Council decision and individual property rights
- whether golf courses are protective or destructive of the environment

The ministry's decision means that the landowner cannot develop a golf course on the lands, pending a final decision by the OMB and any possible court appeals. Several parties, including local residents, The Friends of Marshfield Woods and the Essex Region Conservation Authority objected to the municipality's adoption of the OPA to the OMB. After the ministry's decision to deny approval of the OPA, both the Town of Essex and the proponent appealed the ministry's decision to the OMB. A hearing is pending.

Unfortunately, considerable environmental damage has already occurred as a result of the Hearn Group's clearing trees to create the fairways, and constructing culverts and ponds to drain the wetlands. The interior forest of Marshfield Woods has been significantly degraded and will not recover for a long period of time. For example, the introduction of forest edges throughout this former interior woodlot will change the habitat used by migrating songbirds and other species of concern. One of the most disturbing aspects of this case is that it appears the landowner deliberately attempted to degrade the natural heritage values of the property. In March 2001, the Essex Region Conservation Authority laid charges against the Hearn Group for contraventions of the *Conservation Authorities Act* related to unapproved construction of ponds and other drainage activities and was investigating possible contraventions of the federal *Fisheries Act* related to destruction of fish habitat.

The fact that a landowner was able to deforest such an important natural heritage area points to weaknesses in the current land-use planning system and gaps in Ontario's environmental legislation. For example, there is no requirement for municipalities to designate environmentally significant lands as off-limits to development, and they only need to "have regard to" the PPS policies. There is also no requirement for tree-cutting by-laws, or any provincial law prohibiting or limiting tree-cutting in provincially significant ANSIs, wetlands, woodlands or significant wildlife habitat. Municipalities may pass tree-cutting by-laws, but they are not required to, and these types of by-laws are often appealed to the OMB and the courts. MMAH and other ministries should consider these issues and this example in the five-year review of the PPS required to be undertaken in 2001.

Many commenters on both sides of the debate called for the provincial government to purchase the lands from the proponent. Those interested in property rights said that compensation was required if the province wanted to prevent a landowner from developing his or her property. Those interested in protection of the Marshfield Woods suggested that the lands were as ecologically significant as others included in the province's land acquisition programs, and that permanent protection was necessary to prevent any more destruction.

This case illustrates the need for the government to reconsider the geographic scope of its land acquisition programs to include the remaining fragments of woodlands and wetlands, especially in the extreme southwest of the province. (The ECO review of Ontario's land acquisition programs is found on pages 171-176 of this annual report.)

The ECO commends the Ministry of Municipal Affairs and Housing for upholding the natural heritage policies of the Provincial Policy Statement. It appears that comments by MNR and the Conservation Authority were given considerable weight by MMAH in making its decision. MNR described the importance of Marshfield Woods as a provincially significant wetland, woodland and wildlife habitat. The ERCA recommended that the application be denied. MMAH's decision to deny approval for this proposed development is consistent with the purposes of the *EBR*, especially the protection and conservation of ecological systems and ecologically sensitive areas.

This decision may set an important precedent, and may influence municipalities and the OMB in making decisions on similar development applications affecting significant natural areas in other areas of the province. Regardless of the ministry's decision or the outcome of the OMB appeal hearing, Marshfield Woods will not necessarily be protected, since the land is currently designated "Agricultural," a designation which permits forestry and tree-cutting, and remains at risk of being completely cleared and drained.

Few municipal planning decisions are placed on the Environmental Registry for public comment, because the minister's approval authority for most decisions has been delegated to upper-tier municipalities. The only planning approvals posted on the Environmental Registry are those where the province still remains the approval authority. Essex County does not have an official plan, so it is one of the few areas of the province where the ministry is still the approval authority for lower-tier OPAs, and where public comment opportunity through the *EBR* still exists. This proposal received 76 comments, quite a few of them from outside the local planning area. This case reinforces the value of

and need for provincial oversight of municipalities' planning decisions. It also illustrates why broad public consultation on all Official Plan Amendments and many other planning decisions is important.

The ECO will monitor the outcome of the OMB hearings on this case, as well as MMAH's five-year review of the Provincial Policy Statement.

*For ministry comments, see page 204.*

## Recommendation 9

**The ECO recommends that:**

MMAH and other ministries consider, as part of the five-year review of the Provincial Policy Statement, the need for clearer provincial requirements for municipalities regarding the protection of environmentally significant lands.

## Bill 42: The *Technical Standards and Safety Act*

In 1996, the Ontario government enacted the *Safety and Consumer Statutes Administration Act (SCSAA)*, which created the Technical Standards and Safety Authority (TSSA), a private, not-for-profit corporation. The *SCSAA* transferred the administration of seven safety statutes to the TSSA from the Ministry of Consumer and Business Services.

Among these safety statutes was the *Gasoline Handling Act (GHA)*, which was prescribed under the *EBR* and governed all aspects of the handling of fuel in Ontario. Prior to the establishment of the TSSA, the ministry's Fuel Safety Branch administered this environmentally significant law and its accompanying regulations, policies and instruments.

In 1997 MCBS agreed to delegate its *EBR* responsibilities to the TSSA with respect to the *GHA*. Since that time, the TSSA has posted instruments and other regulatory provisions related to handling gasoline on the Environmental Registry and reports annually to the ECO on its *EBR*-related activities.

In October 1998, MCBS posted a proposal for an Act entitled the *Technical Standards and Safety Act*. This proposed legislation, as originally formulated, repealed the seven individual safety statutes, including the *GHA*, consolidating and harmonizing them. The final legislation, Bill 42, includes a specific provision stating that the *EBR* applies to matters in the bill previously legislated under the *GHA*, such as the new Liquid Fuels Handling Regulation and Code, and it contains basic provisions regarding handling and storing fuel.

However, Bill 42 did not include the technical safety requirements contained in the *GHA*. MCBS and the TSSA have advised that, in the future, these technical details will be contained in regulations. The fact that detailed safety requirements will now be contained in regulations is significant. Regulations are more easily and quickly amended than legislation, which usually receives greater scrutiny when it is formulated and enacted. While the ECO appreciates the flexibility this affords to

and need for provincial oversight of municipalities' planning decisions. It also illustrates why broad public consultation on all Official Plan Amendments and many other planning decisions is important.

The ECO will monitor the outcome of the OMB hearings on this case, as well as MMAH's five-year review of the Provincial Policy Statement.

*For ministry comments, see page 204.*

### Recommendation 9

**The ECO recommends that:**

MMAH and other ministries consider, as part of the five-year review of the Provincial Policy Statement, the need for clearer provincial requirements for municipalities regarding the protection of environmentally significant lands.

## Bill 42: The *Technical Standards and Safety Act*

In 1996, the Ontario government enacted the *Safety and Consumer Statutes Administration Act (SCSAA)*, which created the Technical Standards and Safety Authority (TSSA), a private, not-for-profit corporation. The *SCSAA* transferred the administration of seven safety statutes to the TSSA from the Ministry of Consumer and Business Services.

Among these safety statutes was the *Gasoline Handling Act (GHA)*, which was prescribed under the *EBR* and governed all aspects of the handling of fuel in Ontario. Prior to the establishment of the TSSA, the ministry's Fuel Safety Branch administered this environmentally significant law and its accompanying regulations, policies and instruments.

In 1997 MCBS agreed to delegate its *EBR* responsibilities to the TSSA with respect to the *GHA*. Since that time, the TSSA has posted instruments and other regulatory provisions related to handling gasoline on the Environmental Registry and reports annually to the ECO on its *EBR*-related activities.

In October 1998, MCBS posted a proposal for an Act entitled the *Technical Standards and Safety Act*. This proposed legislation, as originally formulated, repealed the seven individual safety statutes, including the *GHA*, consolidating and harmonizing them. The final legislation, Bill 42, includes a specific provision stating that the *EBR* applies to matters in the bill previously legislated under the *GHA*, such as the new Liquid Fuels Handling Regulation and Code, and it contains basic provisions regarding handling and storing fuel.

However, Bill 42 did not include the technical safety requirements contained in the *GHA*. MCBS and the TSSA have advised that, in the future, these technical details will be contained in regulations. The fact that detailed safety requirements will now be contained in regulations is significant. Regulations are more easily and quickly amended than legislation, which usually receives greater scrutiny when it is formulated and enacted. While the ECO appreciates the flexibility this affords to

policy makers, it is essential that the TSSA and MCBS post these regulations on the Environmental Registry to ensure there is public consultation on them.

In developing Bill 42, MCBS was required to consider its Statement of Environmental Values. However, MCBS advised the ECO that its SEV was not taken into consideration when the ministry made its final decision on all aspects of Bill 42. This lack of consideration is a serious breach of the *EBR*.

Bill 42 is not currently prescribed under the *EBR*, and while the TSSA had been delegated *EBR* responsibilities by MCBS, which may allow Bill 42 to be covered by the *EBR* in the short term, it should become a formally prescribed Act under the *EBR*.

### TSSA as a Model for Alternative Service Delivery

One comment was received with respect to the Registry proposal for Bill 42. The comment was in the form of a comprehensive discussion paper on the creation of the TSSA and the effect of devolving the licencing function from MCBS to TSSA, which includes monitoring and compliance with the safety statutes. The ministry responded by saying that the comment was not applicable to Bill 42 specifically, as it addressed the overall structure and role of the TSSA. The ministry further stated that the comment was more applicable to the upcoming review of the effectiveness of this kind of agency model as an administrative authority.

The formation of the TSSA and the enactment of Bill 42 require careful scrutiny by all residents of Ontario. This Act is significant because it has been recommended as a model for "alternative service delivery" to be adopted by other government ministries with the goal of eliminating "red tape" and streamlining government functions. (For other examples, see the ECO's 1997 annual report). The goal of alternative service delivery is to respond better to changes in industry standards through increased consultation with industry, combined with greater ease in amending standards and regulations.

The ECO recognizes the commenter's concern that there may be a lack of transparency in the decision-making process and compliance with the *EBR* by the TSSA. The provincial government's shift toward alternative service delivery by private non-governmental bodies by its very nature decreases overall public accountability. While Bill 42 is not a prescribed Act under the *EBR*, the ECO is optimistic that all environmentally significant decisions regarding the draft Liquid Fuels Handling Regulation and Code will continue to be subject to the *EBR*. Since 1997, decisions related to the Gasoline Handling Code by the TSSA have been made available on the Registry. However, the TSSA and MCBS need to continue to apply all of the provisions of the *EBR*, especially the consideration of MCBS's SEV, before rendering decisions. Moreover, while the TSSA consults widely with their industry clients, they should recognize that the *EBR* and the Registry will reach a wider and more diverse public and thus lead to better decision-making.

*For ministry comments, see page 205.*

## The *Mining Act*: Part VII Regulation and the Mine Rehabilitation Code

In 1996, Part VII of the *Mining Act* was amended by Bill 26, the *Savings and Restructuring Act*, to create a self-certification system for mine closure and rehabilitation plans. The ECO's 1996 annual report noted that changes to Part VII included:

- more flexible financial assurance provisions in mine closure plans so that mine developers can pass a financial test or pledge financial assurance using less secure assets or royalties instead of providing cash or bonds.
- self-certified closure plans that do not require approval from the Ministry of Northern Development and Mines before mine operations begin.

In response to ECO concerns about the failure of MNDM to post these amendments on the Environmental Registry, the ministry agreed to post the amended regulation, which was expected to be introduced and posted by late 1996. However, it was three years later, in August 1999, that MNDM posted a proposal for the amended regulation on the Registry, along with the new Mine Rehabilitation Code, under Part VII of the *Mining Act*.

The regulation, O. Reg. 240/00 – "Mine Development and Closure under Part VII of the Act," – was filed on April 25, 2000, and took effect on June 30, 2000. The regulation makes major changes to the previous regulation under Part VII. The most significant changes are detailed below. Part VII of the *Mining Act* was proclaimed on the same day that the regulation took effect.

O. Reg. 240/00 introduces the newly developed Mine Rehabilitation Code of Ontario, which sets out minimum requirements relating to mine rehabilitation. All persons engaged in rehabilitating mines and mine hazards must comply with the code. The code includes requirements, guidelines and standards that relate to the following objectives:

- ensuring that inadvertent access to mine openings from the surface is prevented through the use of reinforced concrete or steel caps or backfilling.
- limiting potential hazards and maintaining public safety around open pits, and in relation to the stability of crown pillar and room and pillar operations, and restoring the site to an appropriate land use.
- ensuring the long-term physical stability of tailings dams and other containment structures.
- ensuring that surface water quality is unimpaired and satisfactory for aquatic life and other beneficial uses, and identifying potential contaminants to groundwater.
- determining the potential for significant metal leaching or acid rock drainage and, if needed, ensuring that there are effective prevention, mitigation and monitoring strategies.
- ensuring safety of sites by requiring that all lands, water management structures and other mine-related structures are left in physically stable condition.
- stabilizing surface materials and providing protection from wind or water erosion, improving the appearance of the site, ensuring vegetation growth, and supporting the designated end use of the site.

O. Reg. 240/00 also sets out requirements for the self-certified closure plans introduced in Bill 26: mining companies must file a self-certified closure plan with MNDM, certified by a company's chief financial officer and another senior officer. Prescribed elements of the closure plan must be approved by qualified professionals, including a professional engineer. The closure plan must include information such as current project site conditions, a project description, rehabilitation measures, monitoring programs and procedures, and expected ultimate site conditions.

In its Registry notices, MNDM stated that this streamlined closure plan submission process is intended to make the system more efficient and will uphold Ontario's "stringent environmental standards." Prior to these amendments, MNDM said, the closure plans had to be extensively reviewed by staff at MNDM and the Ministries of Labour, Natural Resources and Environment before they were approved. Instead, the new process allows proponents, along with all involved qualified professionals, to review and certify their own closure plans and the provisions for financial assurance. MNDM maintained that this new method of self-assessment will greatly reduce the length of the closure plan review process.

Although the new closure plan submission process involves self-assessment and self-certification, MNDM is still required to place notice of proposed mine closure plans on the Registry for public notice and comment, which preserves the opportunity for a member of the public to apply for leave to appeal a decision on a mine closure plan. MNDM has 45 days after receiving a closure plan before it is acknowledged or deemed to be filed. Therefore, the ministry must move quickly to post the closure plan on the Registry. Under the new regulation, MNDM may return a closure plan to a proponent for refiling if it does not sufficiently address all of the prescribed requirements for a certified closure plan. These checks may help to prevent proponents from certifying closure plans that do not protect the environment.

Also, the requirement that elements of the closure plan be approved by qualified professionals, including a professional engineer, should help to ensure that all potential rehabilitation and remediation issues are properly addressed. The information required for inclusion in closure plans is extensive and detailed, and proponents must consider many environmental issues and potential problems. Closure plans must also comply with the specific standards, procedures and requirements in the new Mine Rehabilitation Code. The code should have a positive impact on the environment, as it emphasizes environmental health and public safety.

In July 2001, MNDM advised that it had a Memorandum of Understanding with MOE, MNR and MOL to review all mine closure plans. There remains a 45-day period to respond to the closure plan after it is submitted. Ultimately, if there are problems with compliance with the regulation or code, the Director of Rehabilitation has the power to require amendments to the closure plan. Ministries may also carry out their own site inspections after the closure plan has been filed.

Section 145 of the amended *Mining Act* states that the financial assurance required as part of a closure plan, to ensure that there will be funds available for mine closure, may be in the form of compliance with a prescribed corporate financial test. This means that mining companies may meet the financial assurance requirements by satisfying credit rating criteria instead of posting financial security such as cash, a letter of credit or a bond. O. Reg. 240/00 sets out this corporate financial test. A

proponent meets with the corporate financial test for the entire life of the mine if the proponent's credit rating meets or exceeds the satisfactory credit quality/investment grade ratings from two stated credit rating services. A proponent meets with the corporate financial test for the first half of the life of the mine (if the first half of the life of the mine is at least four years) if the proponent's credit rating meets or exceeds the adequate credit quality/investment grade ratings from two credit rating services. Companies that meet the corporate financial test must monitor their credit ratings and inform MNDM if their credit ratings are downgraded, or if any other matters materially affect their financial assurance status.

The change to O. Reg. 240/00 that accepts a credit rating as a form of financial assurance has been criticized on the basis that it provides less assurance than realizable financial securities. If the government does not require adequate financial assurance, there is a danger that there will not be sufficient funds available when mine rehabilitation and remediation is necessary, and that Ontario taxpayers will be required to pay for this. This has happened before. There are many abandoned mines in Ontario that must be rehabilitated at public expense. For example, the ECO's 1999/2000 annual report described the environmental contamination caused by the abandoned Kam Kotia mine and mill site near Timmins, and the expected clean-up cost of over 41 million dollars (see pages 89-90 for an update on the Kam Kotia Mine). However, O. Reg. 240/00 does require a high grade credit rating for a proponent to meet the corporate financial test for this form of financial assurance, and only large companies that are sufficiently capitalized and have the required credit rating may rely on the new financial assurance provisions.

O. Reg. 240/00 also removes a provision in the previous regulation that required mining proponents with projects subject to a closure plan to make an annual report to MNDM on the nature and extent of any rehabilitation work, the results of all monitoring described in the closure plan, and any changes in the conditions of the project. There is no provision for annual reporting under O. Reg. 240/00. The ECO is concerned that annual reporting is no longer required, since any move toward self-regulation should be monitored closely by the ministry responsible.

### ECO Comment

On balance, this new regulation should have positive environmental impacts. The Mine Rehabilitation Code introduces comprehensive procedures and requirements that should help to ensure environmental health and public safety. Although closure plans are now self-certified, they are still subject to public notice and comment under the *EBR*, and some degree of scrutiny by MNDM and MOE. In order to facilitate the public's review of self-certified closure plans, MNDM should consider including hypertext links to the actual proposed closure plans in the proposal notices on the Environmental Registry. These would be similar to the hypertext links that MOE now includes in proposal notices for permits to take water.

The removal of annual reporting on rehabilitation progress is a cause for concern. Where self-regulation is introduced, it is important for the ministry to require and follow up on annual reports by the companies. The ECO would encourage that an annual reporting requirement be reintroduced.

Financial assurance provisions should continue to ensure that proponents will be able to fund any required remediation and rehabilitation. In the long term, the ministries will need to address the

question of how to fund the exceptionally large costs of rehabilitating abandoned mines. The ECO believes that MNDM should consider the model provided under the *Aggregate and Petroleum Resources Law Amendment Act*. Under this model, each aggregate operator contributes levies to special dedicated funds as follows:

- to their own site-specific fund as part of financial assurance for the operation
- to a common floating fund based on production levels
- to municipalities based on production levels.

The Aggregate Producers Association of Ontario (APAO) administers the common floating fund and the rehabilitation program, and decides which sites are to be rehabilitated. As part of the Management of Abandoned Aggregate Properties Fund, APAO also encourages and supports the development of research related to rehabilitation, and monitors the success or failure of completed rehabilitation projects. If the floating fund decreases to an unacceptable level, MNR may impose a fee per tonne of aggregate extracted from pits and quarries to rejuvenate the fund. The ECO suggests that this type of model could be adapted to create a floating fund for the rehabilitation of abandoned mine sites.

*For ministry comments, see page 205.*

## Recommendation 10

**The ECO recommends that:**
MNDM reintroduce an annual reporting requirement in relation to mine rehabilitation.

## Changes to Ontario Regulation 82/95 – Minimum Energy Efficiency Levels

Energy efficient household appliances and commercial equipment use less energy, reducing emissions of greenhouse gases. They also reduce the demand for new sources of energy, especially since many household appliances are used during periods of peak demand. Another benefit for consumers is lower energy costs.

In 2000, the Ministry of Energy, Science and Technology finalized a new regulation to amend O. Reg 82/95, which prescribes minimum energy efficiency standards for products under the *Energy Efficiency Act*. The new regulation, O. Reg. 364/00, sets minimum efficiency levels for six products not previously regulated under this Act, to come into effect on April 1, 2003. These products are vending machines, commercial refrigerators and freezers, ceiling fans, drinking water coolers and high-mast luminaires (street lamps).

question of how to fund the exceptionally large costs of rehabilitating abandoned mines. The ECO believes that MNDM should consider the model provided under the *Aggregate and Petroleum Resources Law Amendment Act*. Under this model, each aggregate operator contributes levies to special dedicated funds as follows:

- to their own site-specific fund as part of financial assurance for the operation
- to a common floating fund based on production levels
- to municipalities based on production levels.

The Aggregate Producers Association of Ontario (APAO) administers the common floating fund and the rehabilitation program, and decides which sites are to be rehabilitated. As part of the Management of Abandoned Aggregate Properties Fund, APAO also encourages and supports the development of research related to rehabilitation, and monitors the success or failure of completed rehabilitation projects. If the floating fund decreases to an unacceptable level, MNR may impose a fee per tonne of aggregate extracted from pits and quarries to rejuvenate the fund. The ECO suggests that this type of model could be adapted to create a floating fund for the rehabilitation of abandoned mine sites.

*For ministry comments, see page 205.*

## Recommendation 10

**The ECO recommends that:**

MNDM reintroduce an annual reporting requirement in relation to mine rehabilitation.

## Changes to Ontario Regulation 82/95 – Minimum Energy Efficiency Levels

Energy efficient household appliances and commercial equipment use less energy, reducing emissions of greenhouse gases. They also reduce the demand for new sources of energy, especially since many household appliances are used during periods of peak demand. Another benefit for consumers is lower energy costs.

In 2000, the Ministry of Energy, Science and Technology finalized a new regulation to amend O. Reg 82/95, which prescribes minimum energy efficiency standards for products under the *Energy Efficiency Act*. The new regulation, O. Reg. 364/00, sets minimum efficiency levels for six products not previously regulated under this Act, to come into effect on April 1, 2003. These products are vending machines, commercial refrigerators and freezers, ceiling fans, drinking water coolers and high-mast luminaires (street lamps).

In addition to setting efficiency levels for previously unregulated products, the regulation updates the former national Canadian Standards Association (CSA) standards for four products already regulated under the *Energy Efficiency Act*, effective January 1, 2001: electric ranges, dehumidifiers, ice makers and incandescent reflector lamps. The new CSA standards will not apply to any of these products that were manufactured before the prescribed implementation date.

In its Registry notice, MEST stated that the purpose of the regulation is to reduce the environmental impact of energy use and encourage energy conservation by increasing the efficiency of products sold or leased in Ontario, which will therefore reduce the consumption of fossil fuels and the release of pollutants to the environment. MEST also explained that fossil fuel generation of electricity results in the emission of oxides of carbon, nitrogen and sulphur, and that these emissions are the principal cause of acid rain, urban smog and potential climate change.

These improvements to energy efficiency standards will have positive environmental and economic impacts, including reductions in carbon dioxide emissions. Any progress made in this area will benefit the environment by reducing the emission of the greenhouse gases that are linked to the warming of the earth's climate.

In the past, the ECO has expressed concern that MEST was not moving quickly enough to improve energy efficiency standards. The ECO's 1998 annual report noted that Ontario began establishing energy efficiency standards as early as 1988 and, for many years, led other Canadian and North American jurisdictions in setting these standards. In recent years, however, Ontario relinquished its leading role in the implementation of new standards. Due to budget constraints, Ontario followed the lead of other jurisdictions, sometimes regulating products several years after they had been regulated in Canada at the federal level, or in the United States. In the 1998 report, the ECO noted that "standards [were] pending for at least another six products." These are the six products now being regulated under O. Reg. 364/00.

In the Registry notice, MEST indicated that these energy efficiency standards are "nationally recognized documents" developed by technical committees as part of a national standards development process under which the CSA develops standards, tests criteria and chairs committees. Representatives of MEST sit on the technical committees that are developing national standards. In the mid-80s, Ontario established this system for setting and harmonizing standards and persuaded other provinces and the federal government to join it. The federal government now funds development of the standards by the CSA, but Ontario continues to participate on committees and consultations.

Since 1998, MEST has increased the number of staff responsible for energy efficiency regulation from one to three people. In addition, last year there was an increase in budget of $50,000. Half of that extra money was used for audits and testing of products in the marketplace, and the other half went toward improving standards.

In implementing the energy efficiency standards prescribed in O. Reg. 364/00, Ontario has moved ahead of the federal government. While these standards were developed by the CSA's national standards committees, the federal government has yet to implement the CSA standards that MEST has

prescribed in this regulation. The standards produced through the CSA's national standards development process are also harmonized with those developed in the United States so that Ontario's standards, once implemented, will be comparable to U.S. standards.

The ECO encourages MEST to continue to develop improved minimum energy efficiency standards in Ontario, and to resume a leadership role in developing these standards with other jurisdictions.

*For ministry comments, see page 206.*

## Need for Action

Under the *Environmental Bill of Rights*, ministries are required to post notice of environmentally significant proposals for policies, Acts, regulations or instruments on the Environmental Registry. Ministries must also post notices of their decisions on those proposals, along with explanations of the effect of public comment on final ministry decisions. But sometimes ministries either fail to post decision notices promptly or do not provide the public with updates on the status of old, undecided proposals. In those cases, neither the public nor the ECO is able to tell whether the ministry is still actively considering the proposal, has decided to drop the proposal, or has implemented a decision based on the proposal while failing to post a decision notice. This reduces the effectiveness of the Registry, and may make members of the public reluctant to rely on the Registry as an accurate source of information. While there is no legal requirement that ministries provide updates on old, undecided proposals, it is helpful to the public. The ECO encourages ministries to post decision notices stating that the ministry has decided not to proceed or has postponed a particular decision. This is more informative than allowing proposal notices to languish on the Registry for years.

The *EBR* requires the ECO to monitor ministries' use of the Registry, and specifically requires the Environmental Commissioner to include in the ECO annual report a list of all proposals posted during the reporting period for which no decision notice has been posted. That list is included in the Supplement to the annual report. The ECO periodically makes inquiries to ministries on the status of proposals that have been on the Registry for more than a year and suggests they post either updates or decision notices.

Below is a list of some selected proposals for policies, Acts and regulations still found on the Registry and which were posted before March 31, 2000. A complete list would be much longer. Ministries have provided neither a decision nor an update for these proposals as of May 30, 2001. Some of these proposals were posted as far back as 1997 and 1998, and some were flagged by the ECO in the 1999/2000 annual report. But ministries did not address them in this reporting year. The ECO urges ministries to update the public and the ECO on the status of these proposals.

MOE

| Registry # – | Proposal Title (date posted: year/month/day) |
|---|---|
| PA7E0005 – | Amendment to Compliance Guideline F-2 (1997/07/08) |
| PA8E0001 – | Ontario's Smog Plan (1998/01/20) |
| PA8E0007 – | Consultation on Proposed Drinking Water Guideline for Protozoa (1998/03/18) |
| PA8E0023 – | Proposed Adoption of Canadian Drinking Water Guideline for Cadmium (1998/03/31) |
| PA8E0029 – | Proposed 1998 Model Sewer Use By-law (1998/06/16) |
| PA8E0030 – | Amendments to the Protocol for the Sampling and Analysis of Industrial/Municipal Waste Water (1998/08/11) |
| PA9E0009 – | Proposed Adoption of CWQ Guidelines for 2 Chlorobenzenes as Interim PWQOs (1999/10/01) |
| PA9E0010 – | Proposed Adoption of CWQ Guidelines for 6 Pesticides as PWQOs and Interim PWQOs (1999/10/01) |
| PA9E0012 – | Stormwater Management Planning and Design Manual (1999/11/26) |
| RA7E0018.P – to RA7E0026.P | various amendments to different sector Regs. (1997/12/30) |
| RA7E0030.P – | Consolidation of Acid Rain Regs. (1997/12/30) |
| RA8E0005 – | Reg. to revoke Reg. 344 (Disposable Milk Containers) (1998/08/14) |
| RA8E0023 – | Draft Waste Management Reg. (1998/06/02) |
| RA8E0025 – | Reg. 903 Water Wells (1998/08/25) |
| RA8E0030 – | Criteria for the Management of Excessive Soil (1998/08/20) |
| RA8E0034 – | Electric Power Generation Sector Regulation Reg. 585/95 (1998/11/27) |
| RA9E0007 – | OPG Inc. Mattagami River Hydroelectric Generating Station Extensions EA (1999/10/05) |

MNR

| | |
|---|---|
| PB6E7001 – | Forest Operations Prescription Guidelines (1996/06/04) |
| PB7E6009.P – | Conservation Strategy for Old Growth Forest Ecosystems on Crown Land in Ontario (1997/07/02) |
| PB7E6014.P – | Enforcement Guidelines for Aboriginal Persons (1997/08/05) |
| PB7E6017.P – | Waterfront Boundaries for Grants of Public Lands (1997/11/03) |
| PB8E1020 – | Depatenting of Crown-owned patented lands pursuant to s. 38(2) of the PLA. (1998/12/18) |
| PB8E2021 – | Statement of Conservation Interest for the Tikamaganda River (1998/11/04) |
| PB8E6004 – | Agreement on Basic Principles – Site Investigation, Clean-up Mid Canada Line (1998/03/18) |
| PB8E6011 – | Policy for issuance of work permits under s.14 of PLA (1998/05/15) |
| PB8E6013 – | Toward the development of resource tenure principles in Ontario (1998/07/10) |
| PB8E6019 – | Forest Management Guidelines for the Conservation of Woodland Caribou (1998/09/01) |
| PB9E2012 – | Canadian Heritage River System (1999/10/26) |
| PB9E3001 – | Pilot Project to rehabilitate ring-necked pheasants (1999/03/01) |
| PB9E6003 – | Development Application Review Manual (1999/03/05) |
| PB9E6009 – | Policies and Procedures on trapping and FWCA (1999/08/03) |

RB7E6001 – Instrument Regulation Prescribing MNR Legislation (1997/11/10)
RB8E3001 – Reg. to prohibit hunting and trapping of wolves (1998/02/12)
RB8E3003 – O.Reg. 245/97 Oil, Gas, Salt Resources Act (1998/09/29)
RB8E5001 – Amendment to Reg. 826 under NEPDA (1998/07/30)
RB9E6015 – Town of Ancaster removal of development control under NEPDA (1999/12/07)

MMAH

AF8E0002 – A Proposed New Municipal Act (1998/04/07)

*For recent developments and ministry comments, see page 206.*

## Recommendation 11

**The ECO recommends that:**

ministries post status updates on old undecided proposals on the Environmental Registry.

RB7E6001 – Instrument Regulation Prescribing MNR Legislation (1997/11/10)
RB8E3001 – Reg. to prohibit hunting and trapping of wolves (1998/02/12)
RB8E3003 – O.Reg. 245/97 Oil, Gas, Salt Resources Act (1998/09/29)
RB8E5001 – Amendment to Reg. 826 under NEPDA (1998/07/30)
RB9E6015 – Town of Ancaster removal of development control under NEPDA (1999/12/07)

MMAH

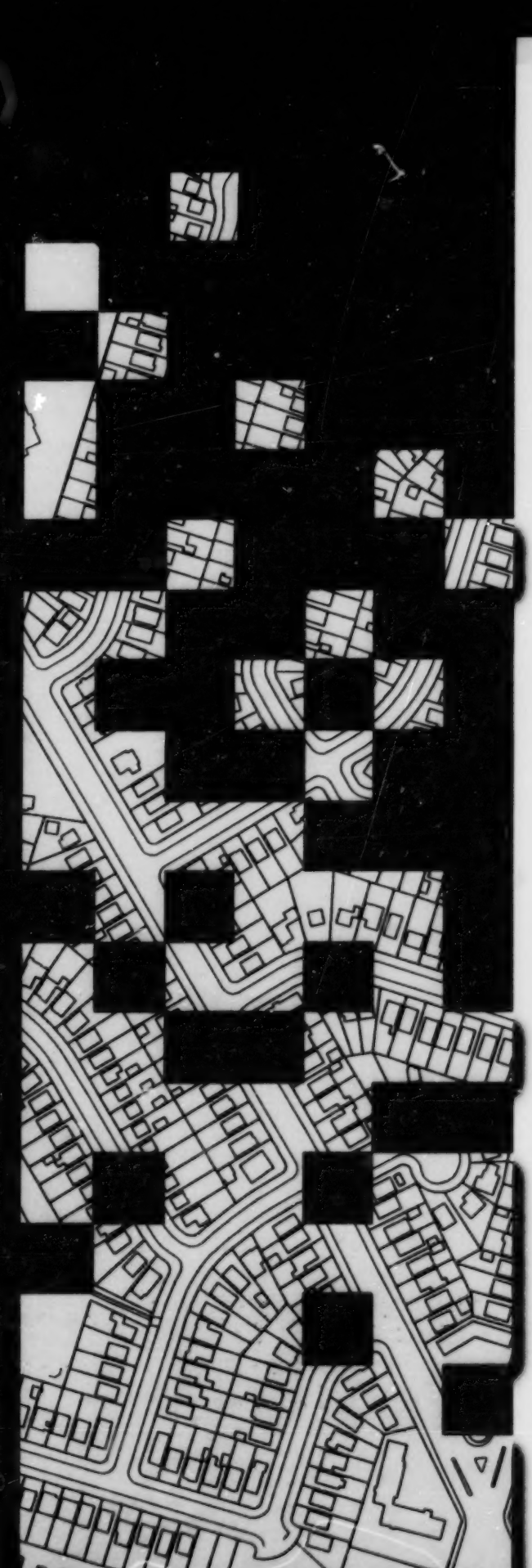
AF8E0002 – A Proposed New Municipal Act (1998/04/07)

*For recent developments and ministry comments, see page 206.*

## Recommendation 11

**The ECO recommends that:**

ministries post status updates on old undecided proposals on the Environmental Registry



# Part 5
## Reviews and Investigations

Members of the public can use the application process provided by the *Environmental Bill of Rights* to urge ministry action they believe is needed to protect the environment. Under the *EBR*, Ontario residents can ask government ministries to review an existing policy, law, regulation or instrument (such as a certificate of approval or permit) if they feel that the environment is not being protected. Residents can also request ministries to review the need for a new law, regulation or policy. Such requests are called applications for review.

Ontario residents can also ask ministries to investigate alleged contraventions of environmental laws, regulations and instruments. These are called applications for investigation.

### The ECO's Role in Applications

Applications for review or investigation are first submitted to the Environmental Commissioner of Ontario, where they are reviewed for completeness. Once ECO staff have decided that a particular application meets the requirements of the *EBR*, the ECO forwards it to the appropriate ministry, which decides whether it will conduct the requested review or investigation or will deny it. The ECO reviews and reports on the handling and disposition of applications by ministries.

Five ministries are required to respond to both applications for review and applications for investigation.

They are:

- Environment
- Natural Resources
- Northern Development and Mines
- Consumer and Business Services (Technical Standards and Safety Authority)
- Energy, Science and Technology

Two ministries are required to respond to applications for review only:

- Agriculture, Food and Rural Affairs
- Municipal Affairs and Housing

## ECO Review of Receipt and Handling of Applications

In the 2000/2001 reporting year, the ECO received and forwarded 12 applications for review and seven applications for investigation. The number of applications for investigation represents a decrease compared to the number received in the 1999/2000 reporting year.

All of the applications for review and investigation, as well as 13 applications that were submitted in previous years, were reviewed by the ECO and have been summarized in Section 5 of the Supplement to this annual report.

The following table provides a breakdown of the disposition of the 12 applications for review by ministry.

| Ministry | Reviews Denied | Reviews Undertaken (but not completed by March 31, 2001) | Reviews Completed |
|---|---|---|---|
| MOE | 5 | 1 | 2 |
| MNR | 1 | | |
| MMAH | 2 | | |
| MNDM | 1 | | |

The majority of applications for review were denied. In many cases, the ECO did not accept the ministries' rationales for denying these applications and was opposed to six of the nine denials. Often, a ministry's response to an application failed to take into account all of the concerns expressed by the applicants. (See Section 5 of the Supplement to this annual report.)

The seven applications for investigation were dealt with as follows:

| Ministry | Investigations Denied | Investigations Undertaken (but not completed by March 31, 2001) | Investigations Completed | Investigations on Hold |
|---|---|---|---|---|
| MOE | 3 | 1 | 1 | 1 |
| MNR | | | | 1 |

The ECO did not agree with MOE's rationale for denying two related applications which alleged *Fisheries Act* contraventions at the Golden Valley landfill site (see I2000003 and I2000004 in Section 6 of the Supplement). A third application for investigation, which was denied April 1, 2001, will be reviewed by the ECO in next year's annual report.

### Common Themes Emerging from ECO Reviews

As reported in previous annual reports, the ECO remains concerned that reviews and investigations are not completed in a timely way. In the case of an unavoidable delay in completion, ministries should ensure that the applicants are kept informed of the status of their applications. Ministries should also pay close attention to the quality of client service provided to applicants. Information provided to applicants should be comprehensive, well organized, and written clearly and in non-technical terms.

Reviews or investigations should be performed without prejudice, and undertaken by ministry staff without previous involvement in an issue. The decision to undertake or deny an application should be based on criteria provided by the *EBR*, and clearly explained to the applicants and the ECO. In the case where an application for review is denied on the basis that the issue is already under review (for example R2000008), the scope of this review should be clearly explained to the applicants and the ECO in the decision rationale provided by the ministry.

In some cases, delays or other problems in processing an application occurred when the applications for review or investigation were not carefully prepared. Applicants are encouraged to indicate clearly what they are asking the ministry to review and why (for reviews), or how they believe an Act, regulation or instrument has been contravened (for investigations).

## Protecting the Oak Ridges Moraine

In March 2000, two *EBR* applications were submitted requesting a review of the need for a new policy, Act or regulation to effect a long-term strategy to protect the Oak Ridges Moraine (ORM). One application was submitted by the Federation of Ontario Naturalists and the Save the Oak Ridges Moraine Coalition. The other application was submitted by two City of Toronto councillors. Both applications were sent to the Ministers of Municipal Affairs and Housing, Natural Resources and

Environment. Because the two applications were similar, and all six files were treated as one by the ministries in a single response, they are reviewed here together.

The applicants asked for immediate implementation of the following short-term measures:

- formal endorsement of a report prepared for the Ontario government by a multi-stakeholder group made up of ministry staff, municipalities, environmental groups, and others, entitled the *Oak Ridges Moraine Strategy for the Greater Toronto Area: An Ecosystem Approach for Long Term Protection and Management* (1994 Draft Strategy).
- a temporary moratorium on new development within the Oak Ridges Moraine.

They also asked for review of the following options for long-term protection of the Moraine:

- enactment of new legislation to protect the Oak Ridges Moraine; or
- designation of the Oak Ridges Moraine as a Planning Area under the *Ontario Planning and Development Act*; or
- creation of an area-specific provincial policy statement for the Oak Ridges Moraine.

Along with any other long-term measures to protect the Moraine, the applicants also requested creation of a provincial land acquisition program to purchase key properties along the Oak Ridges Moraine. The applicants contend that the existing land use planning laws and policies are inadequate to safeguard the ecological integrity of the ORM for several reasons, and they submitted substantial evidence with their applications. The supporting evidence shows that the province's 1991 Implementation Guidelines – Provincial Interest on the Oak Ridges Moraine Area of the Greater Toronto Area (1991 ORM Guidelines) were intended to be an interim measure while a long-term strategy was developed. The applicants included a Draft Strategy developed in 1994 as evidence of the work that had been undertaken toward a long-term strategy.

The applicants cited a number of existing studies as evidence of the environmental significance of the Moraine and the potential harm to the environment. Technical and scientific studies included the background studies prepared between 1991 and 1994 for the 1994 Draft Strategy, as well as more recent geology, hydrogeology, groundwater, natural heritage and planning studies. The 1998 Richmond Hill Corridor Study and the 1999 Report by the Regions of Peel, York and Durham also provided a "state of the Moraine" report for the period from 1991 to 1999, describing changing land use patterns and increasing development activity.

The applicants also included a number of Ontario Municipal Board (OMB) decisions in their applications to demonstrate the uncertain status of the 1991 ORM Guidelines. The decisions show that the OMB panels have taken a wide range of approaches to the 1991 ORM Guidelines in making decisions on development proposals. The applicants also noted that statements supporting the need for a coordinated strategy were contained in the 1994 Draft Strategy, the 1998 Richmond Hill Corridor Study, the 1999 Report by the Regions of Peel, York and Durham, a submission of support by 450 scientists, and letters written by other municipalities such as the Region of Halton and by the Greater Toronto Services Board.

On May 29, 2000, the Ministers of Municipal Affairs and Housing, Natural Resources and Environment denied both applications for review. In a brief letter, the ministers said they took into account several factors:

- The 1991 ORM guidelines have been incorporated into the Official Plans for each Region covering the Moraine and remain in effect.
- The Planning Act was revised, and the Provincial Policy Statement (PPS) issued, in 1996, both with public input.
- The PPS must be reviewed by 2001.
- Municipalities must take into consideration the 1991 ORM Guidelines and the matters of provincial interest set out in the PPS, and are accountable to local residents for planning decisions they make.

The ministers stated: "In closing, the provincial government is committed to the environmental integrity of the Oak Ridges Moraine. We believe the guidelines, policy and legislation comprising the current land use planning system in Ontario provides that protection. Since this sound provincial and municipal framework of policy, guidelines and legislation exists, each of us does not believe that a further review is warranted."

## ECO Comment

The ministers' response to these *EBR* applications was far from adequate. The ministers disregarded the evidence submitted in support of the applications and did not respond to all the issues raised, such as the request for a land acquisition program. Defending the existing policy framework, the ministers simply dismissed the requests for review in their entirety.

For example, the ministers stated that the 1991 ORM Guidelines remain in force, but ignored the evidence suggesting they are not adequately protecting the Moraine, and the fact that the Guidelines were never intended as a long-term solution. The applicants also described new scientific and technical information amassed since 1991, as well as mounting evidence of development pressures and environmental harm. The ECO concludes it was unreasonable for the ministries to rely on the existence of the 1991 ORM Guidelines as a rationale for not undertaking a review.

The ministers also suggested that municipalities and voters are responsible for protecting the Moraine through local planning decisions. This statement is deceptive and factually incorrect. In maintaining that municipalities have the tools needed to protect the Moraine, the ministers failed to acknowledge the municipalities' stated concerns. In a 1999 report, the Regions of York, Peel and Durham, the three upper-tier governments covering most of the Oak Ridges Moraine, concluded that municipal Official Plans cannot deal in a substantive and consistent manner with issues that extend beyond their boundaries. They also warned that continuing to consider development applications under the existing Official Plans and the 1991 ORM Guidelines would not provide long-term protection of the ecological integrity of the Moraine as a whole.

The ministers also failed to acknowledge the significant role of the Ontario Municipal Board (OMB), ignoring evidence that when municipalities do try to limit development, their decisions can be appealed by developers to the OMB. Since changes to the *Planning Act* in 1996, developers can also

appeal directly to the OMB in some situations even before municipalities make final decisions. If the OMB overrules the decision of both levels of municipal government, there is no accountability to local residents.

The applicants provided examples of past OMB decisions to illustrate the uncertain status and ineffectiveness of the 1991 ORM Guidelines, and made a strong case that ad hoc review on a case-by-case basis by the OMB is unsatisfactory, as it is limited to the circumstances directly associated with each particular development proposal. Unlike court decisions, OMB decisions have no precedential value. Therefore, one decision granting ORM protection need not be followed the next time a similar development proposal is decided. At the time of this writing in April 2001, there were many individual hearings scheduled or under way across the Moraine. The hearing process is extremely costly, and much time is spent by OMB members and parties, including, in some cases, provincial ministries, trying to interpret anew each time the provincial policy on the Moraine.

It is commendable, as the ministers stated in denying these *EBR* applications, that "the provincial government is committed to the environmental integrity of the Oak Ridges Moraine." But in the absence of a long-term strategy or statement of provincial policy on the Moraine, there is no common understanding of what level of protection is necessary to ensure "environmental integrity." The province must clarify its policy on the Oak Ridges Moraine.

In summary, the ECO finds that these applications contained compelling evidence and strong arguments in support of the need to undertake a review. The ministries' response was inadequate, and failed to convince the applicants or the ECO that a review was not needed. The evidence the ECO has examined in relation to land use planning on the Moraine strongly suggests that the ministries should have undertaken the requested review.

*There have been recent developments on this issue. For ministry comments, see page 207.*

## Recommendation 12

**The ECO recommends that:**

MMAH, in consultation with other ministries and the public, develop a comprehensive long-term protection strategy for the Oak Ridges Moraine.

## Protecting the Mellon Lake Conservation Reserve

In 2000, an application was submitted by two individuals and three environmental groups requesting that the Ministries of Natural Resources and Northern Development and Mines protect the Mellon Lake Conservation Reserve from mining activities. In the Ontario's Living Legacy Land Use Strategy (OLL Strategy), finalized in 1999, the government announced it was creating or adding to 378 parks and conservation reserves, but that the new protected areas would not affect existing mining tenure (e.g., claims, patents, leases and permits). Lands under existing mining tenure within the

appeal directly to the OMB in some situations even before municipalities make final decisions. If the OMB overrules the decision of both levels of municipal government, there is no accountability to local residents.

The applicants provided examples of past OMB decisions to illustrate the uncertain status and ineffectiveness of the 1991 ORM Guidelines, and made a strong case that ad hoc review on a case-by-case basis by the OMB is unsatisfactory, as it is limited to the circumstances directly associated with each particular development proposal. Unlike court decisions, OMB decisions have no precedential value. Therefore, one decision granting ORM protection need not be followed the next time a similar development proposal is decided. At the time of this writing in April 2001, there were many individual hearings scheduled or under way across the Moraine. The hearing process is extremely costly, and much time is spent by OMB members and parties, including, in some cases, provincial ministries, trying to interpret anew each time the provincial policy on the Moraine.

It is commendable, as the ministers stated in denying these *EBR* applications, that "the provincial government is committed to the environmental integrity of the Oak Ridges Moraine." But in the absence of a long-term strategy or statement of provincial policy on the Moraine, there is no common understanding of what level of protection is necessary to ensure "environmental integrity." The province must clarify its policy on the Oak Ridges Moraine.

In summary, the ECO finds that these applications contained compelling evidence and strong arguments in support of the need to undertake a review. The ministries' response was inadequate, and failed to convince the applicants or the ECO that a review was not needed. The evidence the ECO has examined in relation to land use planning on the Moraine strongly suggests that the ministries should have undertaken the requested review.

*There have been recent developments on this issue. For ministry comments, see page 207.*

### Recommendation 12

**The ECO recommends that:**

MMAH, in consultation with other ministries and the public, develop a comprehensive long-term protection strategy for the Oak Ridges Moraine.

## Protecting the Mellon Lake Conservation Reserve

In 2000, an application was submitted by two individuals and three environmental groups requesting that the Ministries of Natural Resources and Northern Development and Mines protect the Mellon Lake Conservation Reserve from mining activities. In the Ontario's Living Legacy Land Use Strategy (OLL Strategy), finalized in 1999, the government announced it was creating or adding to 378 parks and conservation reserves, but that the new protected areas would not affect existing mining tenure (e.g., claims, patents, leases and permits). Lands under existing mining tenure within the

boundaries of the proposed protected areas would not be included in the protected areas now legally protected by regulation, but would instead be called "forest reserves." If the mining tenure was surrendered or lapsed in the future, those areas would be included in the legally protected area.

At the time the OLL Strategy was finalized in July 1999, only a portion of the lands under existing mining tenure had been identified and designated in the Strategy as forest reserves instead of parks or conservation reserves. The ministries have since identified additional mining claims in 190 of the 378 new parks and conservation reserves announced in the OLL Strategy. The full effect of this policy decision is becoming evident as the public becomes aware of mining activities taking place in areas they thought were protected. That is what happened with the Mellon Lake Conservation Reserve, the subject of an *EBR* application for review.

The area around Mellon Lake in eastern Ontario, northeast of Belleville, was identified as a provincially significant Area of Natural and Scientific Interest (ANSI) by MNR in 1983, because of its size, relatively undisturbed condition and site diversity. The ANSI contains extensive granite rock barrens, cliffs and escarpments, wetlands and rare plant and animal species, including the five-lined skink, considered vulnerable in Ontario. The area was put forward in 1997 by MNR to its Great Lakes-St. Lawrence Round Table as a provincially significant natural heritage area for their consideration as a candidate protected area. It was designated as the Mellon Lake Conservation Reserve in the Proposed OLL Strategy announced in March 1999, and approved in July 1999.

Two new mining claims were staked within the boundaries of the proposed conservation reserve in early March 1999, just before MNR's announcement of the Proposed OLL Strategy. Subsequently, MNR decided that these lands would be designated as a forest reserve, which would not be regulated as part of the conservation reserve. In 1999, the company holding the mining claims built a road through the conservation reserve to access its mining claim areas and carried out bulk sampling, which involved blasting and removing large blocks of granite. In August 2000, the company applied for a permit from MNR under the *Aggregate Resources Act* to operate a quarry.

The *EBR* applicants submitted that these activities had already caused environmental damage and were inconsistent with policies in the OLL Strategy for protecting conservation reserves and forest reserves. They also said the mining claims should not have been staked while the site was being considered for protection during the LfL/OLL process. The applicants requested permanent protection of the area from industrial activity and an immediate halt to all mining-related activity. The application was sent to MNR and MNDM, and both ministries denied the request for review.

MNDM did not meet the minimum requirements of the *EBR* for handling this application for review. The ministry missed deadlines and failed to provide two mandatory notices to the applicants. MNDM did not even clearly state that it was not going to conduct the requested review, but instead provided a "statement of facts" to the ECO, with the primary message that the active mining claims were in "good standing." The ministry did not respond to the applicants' concerns, but did confirm some of the allegations. For example, the ministry confirmed that the minister signed a contract with the claim holder guaranteeing that mining activities could continue unaffected by the OLL Strategy.

MNR, on the other hand, provided an extremely thorough response to the applicants, explaining its reasons for not conducting a review, and responding to most of the applicants' concerns. But MNR's response was structured to defend the policy decisions the applicants wanted reviewed. MNR's main reason for denying the application was that its policy decision had been made within the past five years, with substantial public consultation, and that there was no new information indicating the potential for environmental harm if it did not conduct the review. These are all legitimate reasons under the *EBR* for denying an application.

As MNR pointed out, in 1999 the public was provided with a 30-day period to comment on the government's policy decision to exclude areas with mining tenure from the new protected areas. But the policy decision had already been made, since MNDM offered contracts to mining claim holders on the same day the public was asked to comment on the idea. Further, the public was not given enough information at that time to assess the overall impact of that policy decision, or to provide site-specific comments. The description of the proposed Mellon Lake Conservation Reserve did say that existing mining claims would be excluded from that conservation reserve, but gave no information about the location, size or boundaries of the area affected.

The ministry is now consulting on "refinement" of the final boundaries of each area before they are regulated, but has said that the policy decision to exclude mining tenure from the protected areas will not be revisited. (MNR's use of exception notices on the Environmental Registry for the boundary regulations is discussed on pages 41-42 of this annual report.) The applicants provided evidence of new information not available at the time of the 1999 decision, such as the extent of the mining claims in the Mellon Lake Conservation Reserve, and the environmental harm already caused by bulk sampling and construction of the access road. For all of these reasons, the ECO disagrees with MNR's rationale for denying the application.

In their responses, both ministries implied there was no need to provide interim protection from mining activities until the area was formally proposed as a conservation reserve by the government on March 29, 1999. Their carefully worded statements avoided mention of their commitments in 1997 to provide interim protection at the beginning of the Lands for Life planning process. The applicants were correct in stating that it was widely expected that the candidate areas would be afforded interim protection. This expectation was based on commitments stated in MNR documents, confirmed by MNR staff to the ECO in 1997, and set out in a Memorandum of Understanding (MOU) approved and signed by both MNR and MNDM in August 1997.

The MOU said provincially significant natural heritage areas would be withdrawn from staking under the *Mining Act* before the areas were identified by MNR to the Round Tables, or their locations made public, to provide interim protection during the planning process. Mellon Lake was clearly identified as a provincially significant natural heritage area on maps and documents provided to the Great Lakes-St. Lawrence Round Table in late 1997, and identified to the public as such by the Round Table in February 1998. But none of the proposed protected areas, including the Mellon Lake ANSI, were provided interim protection until May 1999. The public was seriously misled because of this delay – or unannounced change – in the planning process. As a result of the ministries' failure

to provide interim protection, almost 600 mining claims were staked in the proposed protected areas, including Mellon Lake, between February 1997 and May 1999. The ministries should not have suggested in their response to the applicants and the ECO that earlier interim protection was never contemplated or required.

Similarly, MNR referred throughout its response to "pre-existing mining claims," implying that the claims pre-dated the Lands for Life/Ontario's Living Legacy planning process. Older mining claims on these lands lapsed in March 1999 because they were inactive. The "pre-existing mining claims" that are the subject of this application were staked on March 4 and 5, 1999 – two years into the planning process, and just three weeks before the government announced its decision to protect them.

In its response, MNR said the potential for environmental harm was low. MNR said that it was planning to protect over 8,000 ha in the Mellon Lake Conservation Reserve, an area much larger than originally proposed, to ensure that the ministry meets its target of protecting 12 per cent of the entire OLL planning area. MNR also suggested that the five-lined skink habitat is widespread, and both ministries also made the point that the lands will be regulated as part of the Conservation Reserve after mining is completed. But the lands at issue are the core of the proposed protected area, and more valuable because they contain the highest diversity and highest concentration of significant features. The 323 ha under mining claims cover most of the 400 ha Crown Land portion of the Mellon Lake ANSI first identified as a provincially signficant candidate natural heritage area by MNR to the Round Table.

This application also highlighted the inconsistencies between the policies in MNR's OLL Strategy and the guarantees provided to the mining industry in the contracts by the Minister of Nothern Development and Mines. Neither ministry responded to the applicants' request to review this issue. MNDM did not respond to the applicants' concern that the bulk sampling permit was issued without any special consideration of the area's natural heritage values, as is suggested by the forest reserve policies of the OLL Strategy. MNR did not respond to the applicants' concern that the mining company had built a road through the Conservation Reserve without obtaining a permit, and without any special conditions, also in apparent contradiction of the conservation reserve policies of the OLL Strategy.

The MNR policies and the MNDM contracts appear to contradict one another. The OLL Strategy forest reserve policy says that "forest Reserves are areas where protection of natural heritage and special landscapes is a priority, but some resource use can take place with appropriate conditions." But forest reserves are simply mining claims. The forest reserves policy also said that site-specific policies would be developed to maintain identified values, but that is no longer contemplated. The contracts offered by MNDM to mining claim holders guarantee that "where mining properties are adjoining, partially within or totally enclosed by a park or conservation area. . .the Proponent will be entitled to conduct and carry out exploration and other mining activities on its mining properties in the same manner **as if the properties were located elsewhere in the Province**." (emphasis added) As the applicants said in their formal complaint about the ministries' handling of their application, "If one were looking for evidence of a protected area designation being a protected area in name only, one could not find a more blatant statement than that."

Similarly, the OLL conservation reserves policy says that "necessary access to existing claims or leases for exploration or development purposes will be permitted with appropriate consideration for the protection of Conservation Reserve values." A similar statement is included in the OLL parks policy. These OLL policies suggest that the ministries will impose appropriate restrictions on mining access roads through parks and conservation reserves. The road built through the Mellon Lake Conservation Reserve in 1999 may prove that the MNDM contract effectively nullifies the OLL policies, not just in forest reserves, but also in parks and conservation reserves.

MNR said that it would consider the natural heritage values of the area in its consideration of the *Aggregate Resources Act (ARA)* application. It is unclear how much discretion MNR has in this matter, given the claim holder's contract with MNDM. A few months after its response to the applicants' *EBR* application, MNR refused to grant the requested permit under the *ARA*. The ministry refused the permit on procedural grounds under the *ARA* because the company did not adequately address objections filed during public consultation. The company reapplied for a permit in April 2001.

Without government clarification of the public policy contradictions, the Mellon Lake conflict will probably be repeated across the vast area covered by the OLL Strategy, as each proposed protected area is regulated, or as the public becomes aware of mining activities in areas they thought were protected. The public has an opportunity to comment on the refinement of the boundaries for each protected area, and the *ARA* requires public consultation on pit and quarry applications. But the ministries have made it clear that they will not revisit the policy decision to allow mining within the boundaries of the parks and conservation reserves identified in the OLL Strategy, even though new information about the number, size and location of claims in the proposed protected areas is now available. It is unfortunate that the ministries did not take the opportunity afforded by the *EBR* review process to resolve these issues.

(Detailed reviews of MNR and MNDM's handling of this application are found in the Supplement to this annual report.)

*For ministry comments, see pages 207-208.*

## Safety-Kleen

In September 2000, local residents asked the Ministry of the Environment to review the existing certificates of approval (CofAs) for the Safety-Kleen hazardous waste landfill and incinerator near Sarnia. Safety-Kleen is the only commercial facility licensed in Ontario to dispose of most hazardous wastes. In the *EBR* applications for review, the applicants said they were concerned about the impact of the landfill and the incinerator on the environment and human health. MOE responded in December 2000 that it would not review the C of A for the landfill, and that it had reviewed the Cs of A for the incinerator and found them to be adequate.

## Landfill

The landfill has been operating since the early 1960s and had received a C of A and an approval under the *Environmental Assessment Act* for a major expansion in 1997. Safety-Kleen is the largest receiver of hazardous waste in the province. The applicants raised concerns about the increased volumes of waste being handled at the site, particularly wastes imported from the U.S. In support of their request for a review of the CofA, the applicants cited evidence of recent problems, such as the discovery in 1999 of water and methane gas seeping upward through the clay floor of the landfill, and a number of fires at the landfill in 2000. The applicants asked MOE to amend the C of A to:

- require an on-site inspector and geo-technical engineer
- improve emergency response procedures
- increase the amount of financial assurance required
- require treatment of wastes to reduce their toxicity before they are landfilled, as required in the U.S

In MOE's response to the applicants, the ministry said that a review of the C of A for the landfill was not warranted because it was issued within the past five years after substantial public consultation, and there was no new evidence to suggest a review was necessary. The ministry also said that it had been continually reviewing this site since its approval, and that "recent activities at the site have prompted additional changes."

The ECO's review of MOE's handling of this application has concluded that the ministry did have evidence of potential harm that wasn't considered when the environmental assessment was approved and the C of A issued. The most obvious example is that the landfill expansion was approved in 1997 in part because the thick clay underlying the landfill was expected not to leak for 10,000 years. Just two years later, the ministry had to close the site for 10 days when a significant leak (described by MOE as a "gas and water seep") was discovered in subcell 3 of the newly approved area. MOE's occurrence reports for the facility during 1998, 1999 and 2000, examined by the ECO, provide ample evidence to support the applicants' request for an on-site inspector and better emergency response procedures than were required in the 1997 approval.

In its response to the applicants, MOE said that a full-time geo-technical engineer was not needed because Safety-Kleen employs consultants, including geo-technical consultants, and their information is submitted to the ministry in an annual report. But the current system has not been working. The ministry's occurrence reports show that MOE found that Safety-Kleen failed to submit a number of results of monitoring programs to the ministry in its annual reports in 1998 and 1999, as required. (The ECO's commentary on MOE's handling of Safety-Kleen occurrences is discussed on page 81 of this report.)

The ministry appeared to agree with the applicants that some changes were needed, but implied it was Safety-Kleen's responsibility to initiate the action. For example, the ministry said it was "currently considering adding the requirement for an on-site inspector and is discussing this with Safety-Kleen," but that the company was considering a number of issues, including the potential costs and

legal implications of hiring its own on-site inspector. In response to the applicants' concern about improving emergency response measures, MOE said that "Safety-Kleen routinely makes efforts to improve these systems," suggesting that the issue was out of MOE's hands. The ministry agreed that additional financial assurance was required because of the additional monitoring and pumping of groundwater in perpetuity to address the seep in subcell 3. But MOE merely said that it had already advised Safety-Kleen to review the financial assurance requirements. MOE said that changes put forward by Safety-Kleen to address these issues would be codified in a Design and Operations Report submitted to the ministry for approval, but did not provide any details to the applicants.

Some of the matters raised in the *EBR* application for review have now been addressed by MOE and the company. MOE staff later told the ECO that a revised Design and Operations Report was submitted to the ministry for approval in January 2001. It contained a remediation plan for the seep in subcell 3. MOE approved the proposed remediation plan in February, and issued an Order requiring the company to resubmit its final Design and Operations Report, as well as submit a proposal for recalculated financial assurance. In March 2001, MOE hired an inspector for the facility for a three-month period, while the ministry continued its discussion with the company about establishing an on-site inspector position to be funded by the company.

It is unclear at this time of writing (April 2001) whether the applicants will have a meaningful opportunity to comment on Safety-Kleen's Design and Operations Report. The company is required by its C of A to provide any such documents to a Community Liaison Committee before they are submitted to the ministry. But because the landfill has been approved under the *Environmental Assessment Act*, MOE is not required to post any instruments such as amendments to Safety-Kleen's C of A on the Environmental Registry, nor to provide any other opportunity for public consultation.

In its response, MOE did not address the applicants' concerns about increases in imports of hazardous waste from the U.S., or increased volumes of wastes received from generators in Ontario. The ministry admitted that because of the increase in quantities of waste received each year since 1997, Safety-Kleen's expected life span of approximately 15 years of disposal capacity had decreased by December 2000, so that there may only be approximately five years of waste disposal capacity left. The ministry attributed this to "increased market demands."

That demand is undoubtedly going to continue to rise, given recent changes to Ontario's rules for classifying hazardous waste (described on pages 103-104), and because the Safety-Kleen site is licensed to accept wastes that cannot be disposed of in the U.S. without expensive pre-treatment. Instead of responding to the request that the company's C of A be strengthened to match the U.S. rule, the ministry simply confirmed that pre-treatment is not presently required.

### Incinerator

Safety-Kleen's incinerator was built in the late 1960s and has been modified several times since then. The incinerator has a C of A for the waste site first issued in 1986, and a separate C of A for air emissions first issued in 1994. Both Cs of A were last amended in 1998 to approve modifications and allow increased incineration. The applicants alleged that the terms and conditions of the Cs of A are inad-

equate to protect the environment and human health because the standards that govern air emissions are not as stringent as those governing hazardous waste incinerators in the United States.

MOE responded to the applicants that the ministry had carried out a review of the Cs of A for the incinerator and concluded that they adequately regulate air emissions by requiring that "all applicable Ontario regulatory and policy standards be met." In its response to the applicants, the ministry also said that "the Ministry of the Environment does not consider it appropriate to review Certificate of Approval applications against United States emission standards or emission standards imposed by any other jurisdictions outside of Ontario." This contradicts the reasons the ministry gave in 1998 for turning down an *EBR* request for review of the need for new standards on air emissions from hazardous waste incinerators. At that time, MOE said that new standards were not necessary because the ministry "considers" U.S. emission limits and new technologies for incineration during the approvals process and that this could lead to applying more stringent requirements than Ontario's. MOE's assertion that reviewing the Safety-Kleen's Cs of A against U.S. standards was not considered appropriate is not consistent with the ministry's "six-point action plan," announced in 1999. In press releases and statements, the ministry gave the impression that the "action plan" included reviewing and strengthening existing Cs of A for hazardous waste facilities to match U.S. requirements.

The ministry said that the applicants had not provided any evidence, nor was the ministry aware of any such evidence, that air emissions from the Safety-Kleen incinerator are a significant harm to the environment. Stack testing results provided by the company, said the ministry, have consistently shown the facility to meet Ontario's health-based Point of Impingement (POI) requirements by a large margin. MOE also said that new Canadian air emission standards (Canada-wide Standards or CWS) that are more stringent than those of the U.S. have been developed for application to existing hazardous waste incinerators by 2006, and that Safety-Kleen had advised the ministry that it intends to meet the new standards before 2006.

The ECO's review found that the existing Cs of A for the incinerator require only that emissions meet Ontario's POI standards and four additional constraints. Most of these POI standards have not been updated in over 20 years. The limits currently applicable to the Safety-Kleen incinerator are in fact much less stringent than either U.S. standards finalized in 1999 for air emissions from hazardous waste incinerators or MOE's standards finalized in 1995 for air emissions from new and modified municipal (non-hazardous) waste incinerators.

The ministry told the applicants that new Canada-wide Standards will be applied to Safety-Kleen by 2006. The ministry did not explain, however, that new CWS have been developed for only four of the approximately 140 contaminants emitted from the Safety-Kleen incinerator. In contrast, the U.S standards for air emissions from hazardous waste incinerators were finalized in 1999 and will be fully implemented by 2003. They cover the contaminants included in the CWS, plus volatile metals (cadmium and lead), four other semi-volatile metals, acid gases, hydrocarbons, carbon monoxide and organic residues.

The proposed new CWS standards for dioxins and furans emitted by existing hazardous waste incinerators are very stringent. But as of April 2001, these are still just proposals in Ontario. Ontario

adopted the CWS for mercury in June 2000. It applies to new or expanding facilities immediately, but is not expected to apply to existing hazardous waste incinerators in Ontario until 2006. If that standard is to be met, Safety-Kleen's mercury emission rate will have to be reduced by 94 per cent from its emission rate in 1999. Meeting the proposed CWS for mercury, dioxins and furans could contribute significantly toward Ontario's meeting its commitments to reduce emissions, since the Safety-Kleen facility accounts for a significant portion of the province's total emissions of these toxic and persistent pollutants. Plant improvements to meet the CWS may also reduce other contaminants.

MOE is also currently reviewing its outdated air quality standards, including the existing POI standards. This could eventually result in changes to the limits for other contaminants of concern from Safety-Kleen. However, the ECO believes that the ministry does not need to wait for the CWS or for its own air quality standards initiative before reviewing the emission limits applicable to the Safety-Kleen incinerator. MOE has already set a precedent in 1995 by setting limits more stringent than Ontario's POI standards for particulates, heavy metals (cadmium, lead and mercury) and acid gases to apply to new or modified municipal waste incinerators.

When MOE responded to the applicants in December 2000, the ministry said it was already engaged in discussions with Safety-Kleen "to improve its capability to meet the CWS standards." MOE should have been clearer and informed the applicants that the company was planning to amend its CofAs, and that there would be proposals to this effect posted on the Environmental Registry. (Since the incinerator did not receive its approval under the *Environmental Assessment Act*, amendments to its Cs of A have to be posted on the Environmental Registry.) Nor did MOE give any indication to the applicants that the company was planning to increase the rate of incineration. The Registry proposals, posted in December 2000, say that emission rates for most compounds should improve, but do not say whether the proposed CWS will be met. They also do not explain whether the improvement in emission rates will be offset by an increase in the volume of waste incinerated, possibly resulting in increased total loadings of pollutants to the air. The ECO will monitor MOE's decision on the proposed amendments.

### ECO Comment

In its responses to these *EBR* applications, MOE seemed to acknowledge there was room for improvement in the CofAs, but suggested that it was up to the company to initiate changes. MOE did not explain that the company was planning amendments, nor did the ministry let the applicants know how they could participate in the ministry's decision-making on any future approvals. This left an impression that the ministry is working with the company behind closed doors.

MOE's response to these applications leaves the ECO and the applicants wondering – who is in charge, the ministry or the company? Public confidence in the hazardous waste facility and in MOE's ability to regulate it has been shaken by recent events, resulting in public protests at the company's gate, and prompting these *EBR* applications for review. To restore public trust and its own credibility, MOE has to be seen to be in charge, and to be making decisions in a transparent and accountable manner. Given the interest and concern expressed by the local community, MOE should make reasonable efforts to provide additional opportunities for public participation before it issues instruments such as an approval for the amended Design and Operations Report for the landfill and for modifications to the incinerator.

(See the related discussion in the review of Ontario Regulation 558/00, found on pages 103-106 and in the Supplement to this annual report, as well as a discussion of hazardous waste management as a "Significant Issue" on pages 44-47 of this report.)

*For ministry comments, see pages 208-209.*

## *Fisheries Act* Violations

In 1997, three *EBR* applications for investigation were submitted to the ECO, alleging that Ontario Hydro had contravened Subsection 36(3) of the federal *Fisheries Act*. This subsection prohibits the deposit of a "deleterious substance" of any kind in water where there are fish. The applicants included local residents, the City of Pickering, and a coalition of environmental groups.

Specifically, the applicants alleged that Ontario Hydro (now known as Ontario Power Generation) had discharged large quantities of metal contaminants into Lake Ontario, Lake Erie and the St. Clair River because of the erosion of the Admiralty brass condenser tube walls used in the condenser cooling water system at several power generating stations. Admiralty brass is an alloy composed of 72 per cent copper, 27 per cent zinc, 1 per cent tin, 0.07 per cent lead, 0.06 per cent iron and 0.04 per cent arsenic.

The Ministry of Natural Resources carried out a single investigation for all three applications in August 1997. However, the ministry's completed report of its investigation was not released to the ECO until late May 2000.

The investigation by MNR focused on whether the concentrations of copper and zinc in the aquatic environment of the Great Lakes affected the sportfish that people eat, the commercial sale of fish, and the health of fish and other aquatic organisms. The ministry concluded that, generally speaking, copper and zinc do not pose a serious threat to the people who eat sportfish, nor to the commercial sale of fish or the general health of fish in the Great Lakes system. MNR concluded that, given the existing data and scientific knowledge, it would "not be possible to demonstrate, beyond a reasonable doubt, that the discharge of copper and zinc had, or is likely to have a *negative effect* on local aquatic organisms." [emphasis added] Because aquatic organisms need copper and zinc to survive, the ministry added, there was reasonable doubt as to whether the discharged metals should be considered "deleterious substances" as defined by the *Fisheries Act*.

The ECO is very concerned with the way in which the MNR investigation was undertaken and with the ministry's decision not to charge Ontario Hydro under the *Fisheries Act*. MNR's investigative report was based on the assumption that evidence of a "negative effect" must exist prior to charges being laid. This is incorrect. Under the *Fisheries Act*, there is no need to show a negative effect. Instead, it's enough to demonstrate that a deleterious substance has been discharged into waters where there are fish. The only legal defense applicable is that of due diligence – in other words, Ontario Hydro must demonstrate that everything possible was done to prevent the harmful substances from entering the water.

It is the ECO's opinion that there was a *Fisheries Act* contravention. Ontario Hydro knowingly continued to release the deleterious substances into the water even after the problem was discovered in 1981. Ontario Hydro has admitted that the discharges took place, and the evidence presented by the applicants supports the ECO's conclusion that there was a contravention of the Act.

At the same time, MNR's assertion that to undertake a successful prosecution it was necessary to demonstrate "beyond a reasonable doubt" that the discharge of copper and zinc had a negative effect on local aquatic organisms is invalid. In this case, the ECO believes that MNR inappropriately applied the *Environmental Protection Act* standard (Section 14), which stipulates that evidence of adverse effects beyond a reasonable doubt must be demonstrated by the Crown in order for prosecution to take place.

Therefore, MNR's report on the completed investigation of the alleged *Fisheries Act* contraventions by Ontario Hydro was based on an inappropriate interpretation of the law. The ministry's investigation itself also lacked substantive rigour, original data, up-to-date scientific sources, and appropriate sampling data. In fact, MNR relied in part on data provided by the alleged violator. (For a full review of MNR's handling of this application, see pages 215-217 of the Supplement to this annual report.)

Finally, the ECO remains greatly concerned with the excessive length of time taken for MNR to complete this investigation. The ministry's delay in providing the results of its investigation has frustrated the applicants' rights under the *EBR*, and has constrained their opportunities to pursue alternative legal action due to the two-year statute of limitations on *Fisheries Act* violations.

Two positive outcomes have resulted from this investigation:

- The ECO has been assured by Ontario Power Generation that the Admiralty brass condenser tubes responsible for the discharge of metal contaminants are no longer in use at any of the operating power generating stations. However, this situation may change when nuclear plants, which are currently mothballed, are re-opened.
- MNR has requested that the Department of Fisheries and Oceans review the need for regulatory reform in setting limits and standards for the deposit of metals from generating stations and similar industries.

Regardless of the above, MNR's investigation of Ontario Hydro's alleged contravention of the *Fisheries Act* remains one of the most unresponsive, long-delayed and substantively lax investigations in the history of the *Environmental Bill of Rights*.

*For ministry comments, see pages 209-210.*

# Part 6

## Appeals, Lawsuits, and Whistleblowers

Ontarians have the right to comment on government proposals, ask for a review of current laws, or request an investigation if they think someone is breaking a significant environmental law. But they also have other opportunities for using the *Environmental Bill of Rights* (*EBR*). They include:

- the right to appeal certain ministry decisions.
- the right to sue for damages for direct economic or personal loss because of a public nuisance that has harmed the environment.
- the right to sue if someone is breaking, or is about to break, an environmental law that has caused, or will cause, harm to a public resource.
- the right to employee protection against reprisals for reporting environmental violations in the workplace and for using the rights available to them under the *EBR*.

## Appeals

The *EBR* gives Ontarians the right to apply for leave to appeal ministry decisions to issue certain instruments, such as the permits, licences or certificates of approval granted to companies or individuals. The person seeking leave to appeal must apply to the proper appeal body, such as the Environmental Review Tribunal (ERT), within 15 days of the decision's being posted on the Environmental Registry. They must show they have an "interest" in the decision, that no "reasonable" person could have made the decision, and that it could result in significant harm to the environment.

During this past reporting period, concerned residents and environmental groups filed several leave to appeal applications on a range of approvals issued by the Ministry of the Environment. The approvals include permits to take water (PTTWs) and orders for preventative or remedial measures made by MOE. Discussion of some of these leave to appeal applications is set out below. (Further details on these applications are provided in the chart on leave to appeal applications found in Section 6 of the Supplement to this report.)

### Status of Appeals

At the beginning of the reporting period (April 1, 2000), there were no applications for leave to appeal under the *EBR* pending before the Environmental Review Tribunal, which hears appeals of MOE instruments. However, during the reporting period, seven leave to appeal applications were initiated, one of which was granted. The other six applications were denied for various reasons, including two cases where the ERT decided that it did not have jurisdiction to deal with the applications. In the first case, the applicants failed to file their application within the 15-day period required by the *EBR*. In the second case, the ERT found that the applicants had sought to appeal an instrument issued under the *Ontario Water Resources Act* that was not prescribed for posting under the *EBR* and thus could not be appealed.

To ensure that the appeal process does not unduly delay approvals, the *EBR* requires appeal tribunals to make decisions on whether to grant leave to appeal within 30 days after an application is filed. However, in practice, the 30-day time limit is difficult to meet because of extensions requested by the parties, the large amount of background documentation that requires review, and the opportunity provided to the other parties to respond and the applicant to reply further to these responses. During the past year, according to information provided to the ECO by the ERT, the time between filing and decision-making for cases at the ERT ranged between 38 days and 61 days. (In 1999/2000, the range was 29 days to 99 days.)

| **Leave to Appeal Applications Summary** | **Result** |
|---|---|
| ERT claims no jurisdiction | 2 |
| Leave Granted | 1 |
| Leave Denied | 4 |
| **Total Applications Launched** | **7** |

### MOE Instruments

Eleven "instrument holder" notices of appeal for MOE instruments were posted on the Environmental Registry during the reporting period. The *EBR* requires the ECO to post notices of these appeals, which are launched by companies or individuals who were denied an instrument or were unsatisfied with its terms and conditions. The notices alert members of the public who may then decide to become involved with an appeal.

## MMAH Instruments

Nine notices of appeal for MMAH instruments were also posted on the Environmental Registry during the reporting period. These appeals are launched by residents, companies or municipalities in relation to decisions made by the Minister of Municipal Affairs and Housing under the *Planning Act*.

## Residents Appeal Water-Taking Permits

As in the 1999/2000 reporting period, the majority of the leave to appeal applications again this year were related to permits to take water (PTTWs), many of them brought by cottagers and local residents unhappy with PTTWs issued by MOE under Section 34 of the *Ontario Water Resources Act*. In 2000/2001, this pattern continued.

For example, in September 2000, several individuals and groups, including the Council of Canadians, sought leave to appeal a PTTW that allowed OMYA (Canada) Inc. to take water from the Tay River. The PTTW authorizes OMYA to take water in two phases: 1,483 cubic metres/day until January 1, 2004, during Phase I; and 4,500 cubic metres/day until January 1, 2010, during Phase II. MOE made the PTTW conditional on the MOE Director's approval of a scientific report from OMYA on issues such as the aquatic habitat and the presence of fish and other aquatic life.

The applicants' grounds for seeking leave to appeal this case included seven allegations, the most important of which were that the MOE Director failed to protect the quality of the natural environment and promote the efficient use and conservation of resources.

In November 2000, the ERT granted all of the applicants leave to appeal the entire PTTW, finding that applicants had all identified the central issue to be whether MOE's decision was based on sufficient data on the Tay River watershed. If there were information gaps, the Tribunal noted, the MOE Director would have reason to be uncertain about the consequences of the water taking, and his decision could result in significant harm to the environment.

The ERT found some exaggeration on both sides of the dialogue: the Tribunal did not find as great an information gap in the materials underlying the PTTW as inferred by the applicants, nor, on the other hand, the sufficiency of information claimed by the instrument holder and MOE.

In conclusion, the ERT found that it was not reasonable for the MOE Director to issue a PTTW, since the first relevant stream flow data from the Phase I water taking would not be available until January 1, 2004, and reliable data may not be available for many years. This created a degree of uncertainty about impacts on the aquatic habitat of the river and raised the possibility of significant harm to the environment. Thus, the Tribunal concluded, the applications met both the reasonableness and environmental criteria of the test for leave to appeal.

The ECO will review the results of this appeal hearing in our 2001/2002 annual report.

## The Right to Sue for Public Nuisance

Any person in Ontario who experiences direct economic or personal loss because of a public nuisance causing environmental harm may sue for damages or other personal remedies under the *EBR*. Individuals in almost every other area of Canada can sue only if certain conditions based on common law rules are met. The *EBR* eliminates the need to get the Attorney General to take the case on

behalf of the plaintiffs or to get the consent of the Attorney General to undertake an action. The *EBR* also clarifies that direct damages are recoverable and specifies that the person does not have to suffer unique economic damages or personal injuries to make a successful claim.

### The Keele Valley Landfill Public Nuisance Case

As reported in previous annual reports, in 1997 a class action law suit alleging public nuisance and other grounds was filed by John Hollick on behalf of about 30,000 residents who live in a defined geographic area surrounding the Keele Valley Landfill site. The defendant in this case is the City of Toronto, which has owned and operated the dump since 1983. The landfill is one of the largest waste disposal sites in Canada, covering about 245 acres, with a buffer area of over 650 acres. Mr. Hollick complained that the landfill has caused excessive noise, odours, harmful emissions and related problems with seagull droppings, and that members of the community and their health have suffered since it was constructed. He argued that the dump is a public nuisance causing environmental harm and that as a result, activity at the dump should be stopped and he and the other residents should be awarded damages under Section 103 of the *EBR*.

In order to proceed, the action had to first be certified by a court as a "class action." Initially, the case was certified, but the City of Toronto successfully appealed that decision to the Ontario Divisional Court, which found that the evidence did not show that all 30,000 residents had suffered nuisance impacts from the landfill. The Ontario Court of Appeal upheld the Divisional Court decision in 1999. Essentially, the Court found it fundamentally inappropriate to certify a public nuisance action as a class action because the residents' complaints were not similar enough and were spread over too many years to constitute a "class." It concluded that "one should not assume an overlap between" class proceedings and the right to sue for damages found at Section 103 of the *EBR*.

However, the plaintiff sought leave to appeal the Court of Appeal's decision, and in October 2000, the Supreme Court of Canada granted the plaintiff's request.

On March 1, 2001, the ECO was granted intervener status to the Supreme Court in the Hollick case. The ECO takes no position on the merits of this particular case, but intervened because the findings of the Ontario Court of Appeal related to the interpretation of the *EBR*, and specifically, the *EBR*'s public nuisance cause of action.

The ECO argues that the Ontario Court of Appeal did not properly interpret and apply Section 103 of the *EBR* and its relation to the *Class Proceedings Act, 1992*. In drafting Section 103, the Task Force on the Ontario *Environmental Bill of Rights* intended that this provision work together with the class action legislation in order to facilitate public nuisance claims. The Ontario government had recognized that class proceedings reform was an integral part of environmental reform, given the expense and complex nature of environmental claims brought by citizens of the province. Often the only effective proceeding for these offences is a class proceeding. The expense of such an individual claim as an impediment was a concern for the framers of the *EBR* and remains a concern for the ECO, but was not considered by the Court of Appeal.

The ECO is concerned that the Court's interpretation may deprive individuals who have suffered as a result of a public nuisance causing environmental harm of compensation from the court.

By intervening, the ECO hopes to provide the court with valuable institutional knowledge regarding the legislative history and purpose of the *EBR*, the intention of the framers of the *EBR*, and the social and political context in which the need for the *EBR* and Section 103 arose. The ECO has special expertise and experience on the relevant issues and the experience of Ontario residents in litigating environmental claims on an individual basis, and believes that the issues raised by this action are important for all residents of Ontario.

The Supreme Court of Canada heard this case on June 13, 2001. It may be some time before a decision is reached as to whether the residents can proceed as a class and continue their claim, but the ECO hopes to report on the Supreme Court's decision in our 2001/2002 annual report.

### New Public Nuisance Case Launched in March 2001

In March 2001, Wilfred Pearson launched a class action lawsuit against Inco Limited, the City of Port Colborne, the Regional Municipality of Niagara, the District School Board of Niagara, and the Niagara Catholic District School Board. Section 103 of the *EBR* is listed as one cause of action. Mr. Pearson resides near Inco's Port Colborne refinery where Inco has operated a refinery producing nickel, copper, cobalt and other precious metals since 1918.

The action was commenced as a class proceeding under the *Class Proceedings Act, 1992*, on behalf of all persons who, since March 26, 1995, either occupied or owned property or attended schools operated by the District School Board of Niagara and the Niagara Catholic District School Board within a defined surrounding area.

Mr. Pearson claims that Inco has discharged and still does discharge hazardous contaminants into the air, water and soil of Port Colborne, including soluble inorganic nickel compounds, copper, cobalt, chlorine, arsenic and lead. He claims that nickel oxide, a known carcinogen, is the most abundant contaminant emitted by Inco and can now be found in quantities exceeding all accepted levels. To compensate the class for the damage caused by the release of these contaminants, the plaintiff is claiming $150 million for Inco's alleged reckless disregard for the health, safety and pecuniary interests of class members. He is also claiming $600 million for the loss of use and value of their property, damage to their physical and emotional health, and exposure to known carcinogens and toxic substances. The plaintiff alleges that the defendants were negligent, because they knew or ought to have known of the release and effects of the contaminants, and that the defendants failed to warn the class members or take any steps to remedy the damage they suffered.

Since the claim was filed, Inco has stated that it has been working with the City of Port Colborne and MOE to assess whether any serious health issues exist in connection with the history of the operation of its refinery. In addition, Inco states that it has also been working with MOE concerning the landfill activities that were conducted in the area dating back to the early 1900s and the possible sources of such landfill. Although Inco has pledged to defend itself vigorously, stating that a number of the plantiff's allegations are not supported by the facts, on April 25, 2001, the company announced that it would voluntarily remediate the soils of 16 properties identified by MOE and has voluntarily accepted responsibility for surface soil nickel concentrations in the Port Colborne area.

The progress of this case may be shaped by the Supreme Court of Canada decision in the Hollick case, discussed above. The ECO will report on the progress of this case in our 2001/2002 annual report.

## The Right to Sue for Harm to a Public Resource

The *EBR* gives Ontarians the right to sue if someone is violating, or is about to violate, an environmentally significant Act, regulation or instrument, and has harmed, or will harm, a public resource. Last year, the ECO reported on one such case – the legal proceedings brought by the Braeker family against the Ministry of the Environment and Max Karge, the owner of a property adjacent to the plaintiffs' farm, in relation to an illegal tire dump on Karge's land. Notice of the action was posted on the Environmental Registry in November 1998, and the action is ongoing. The ECO will continue to monitor this case currently pending before the court.

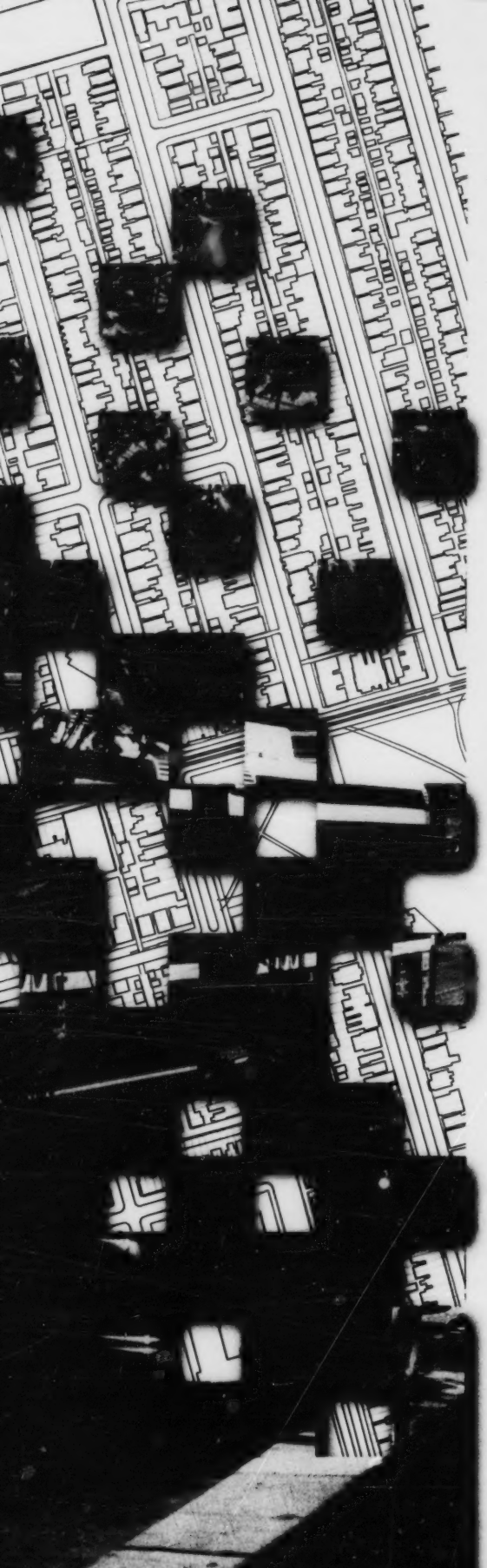
## Whistleblower Rights

The *EBR* protects employees from reprisals by employers if they report unsafe environmental practices of their employers or otherwise use their rights under the *EBR*. There were no whistle-blower cases in the reporting period, between April 1, 2000, and March 31, 2001.

## *EBR* Litigation Rights Workshop

On May 25, 2000, the Environmental Commissioner of Ontario hosted a workshop to examine the effectiveness of the litigation rights contained in Ontario's *EBR*. Invitations to attend the workshop and a background paper on *EBR* litigation rights were sent to a wide range of stakeholders. Fifty-six participants, representing private companies, environmental groups, labour unions and government ministries, attended the all-day workshop.

The purpose of the workshop was to provide stakeholders with an opportunity to share their experiences with the *EBR*'s litigation rights and their insights into the effectiveness of those rights. Further details on the workshop are found in Section 9 of the Supplement to this report and also at the ECO Web site at www.eco.on.ca/english/publicat/index.htm.



# Part 7

## Ministry Progress

Each year, the ECO follows up on the progress made by the prescribed ministries in implementing recommendations made in previous years. ECO staff have conducted a review of ministry progress on all 21 recommendations in the 1999/2000 ECO annual report. Though progress is often slow, a few ministries have succeeded in at least partially implementing ECO recommendations, as shown below.

## Ministry Implementation of 1999/2000 ECO Recommendations

### Use of the Environmental Registry

The Ministry of the Environment was asked again this year to revise the Registry template to indicate clearly where the public can find supporting information on Registry notices, and to make clear the differences between information notices and exception notices. MOE has reported that the revised template is in the process of being developed and the ECO will be updated on this in the spring of 2001.While the ECO is concerned with the length of time it has taken for action to be taken, we are glad to see that efforts are being made to improve the template. Pages 37-41 of this report discuss Information Notices and Exception Notices in more detail.

MOE was also asked to provide more complete information for permit to take water proposals, including expiry dates. The ministry reported that it has opted to display the proposals in point form, highlighting the pertinent information and including a brief summary of the water-

taking activity. The ECO intends to conduct a full review of MOE's Registry notices in 2001/2002, and will be monitoring the ministry's commitment to improving the Registry in the upcoming year.

The ECO also recommended in last year's annual report that MOE use the Registry to consult with Ontario residents when it makes broad strategic decisions about its enforcement efforts. MOE responded that in 2000 the ministry used the Registry when announcing its environmental SWAT Team and new legislation such as the *Toughest Environmental Penalties Act*, which was posted on the Registry in draft form for a 30-day comment period. But as of April 2001, the ministry had not posted a decision notice on the Act, which has received third reading in the Legislature. (For more information on *TEPA*, see pages 101-102 of this report and pages 101-103 of the Supplement to the report for the ECO's review of MOE's decision on this Act.)

In last year's report, the ECO urged the the Ministry of Natural Resources to finalize and post its instrument classification regulation on the Registry as soon as possible. Although MNR reported that the development of the regulation is still ongoing, as of April 2001, the most recent draft proposal notice had not yet been posted on the Registry.

*For recent developments, see ministry comments, page 186.*

### Protecting Ontario's Groundwater

In July 2000, the ECO issued a Special Report on groundwater protection and intensive farming, two significant environmental issues which, in the wake of the Walkerton tragedy, have attracted much attention. This Special Report called for MOE to introduce legislation that will address the environmental effects of intensive farming and come up with a strategy that will protect groundwater, working together with other prescribed ministries and in consultation with key stakeholders. In spite of reports of progress by key partner ministries – Agriculture, Food and Rural Affairs; Natural Resources; Municipal Affairs and Housing; and Health and Long-Term Care – this strategy has still not been developed.

Other ministries have also recognized their role in the protection of Ontario's groundwater. For example, the Ministry of Consumer and Business Services has reported that it recognizes that activities covered by the *Gasoline Handling Act* may have implications for groundwater quality in Ontario, and has been meeting with MOE and the Technical Standards and Safety Authority to determine whether further operational or legislative actions could strengthen the protection of the environment.

MOE also reported progress on the following initiatives: municipal groundwater studies focused on monitoring groundwater conditions; consultations on nutrient management and small water works; and investments in the establishment of a Provincial Groundwater Monitoring Network. (See pages 84-89 of this report for an update on the provincial groundwater strategy.)

### Intensive Farming

In its Special Report, the ECO encouraged OMAFRA, MOE and MMAH to work diligently to finalize new legislation regulating intensive farming operations in Ontario. These ministries reported that they are continuing to work together to develop a comprehensive approach to handling intensive agricultural operations. In July 2000, the Task Force on Intensive Agricultural Operations in Rural

Ontario released a report, and on the same day, OMAFRA released a proposal for legislation regulating agricultural operations. However, finalization of this legislation has been delayed until the completion of the Walkerton Inquiry.

OMAFRA and MOE reported that they are addressing environmental impacts arising from intensive farming operations in all areas. Guidelines that specify the rules related to the land application of sewage biosolids, pulp and paper sludge and septage to farm land are currently being reviewed by MOE. (See pages 48-56 of this report for a discussion of biosolids management.)

### Successor Agreement to the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA)

The ECO recommended that MOE's development of a successor agreement to the COA include a clear public accounting of both accomplishments and shortcomings of the expired COA; a management structure with clear interim benchmarks and mechanisms for mid-course corrections when barriers are encountered; and public consultation and posting on the Registry.

MOE responded that it will continue under the COA to fulfil its commitment to report biennially to the International Joint Commission on programs addressing the Great Lakes. According to MOE, Ontario has consulted Great Lakes stakeholders in renegotiating a renewed COA, and the revised successor COA is expected to be posted on the Registry in the summer of 2001.

The absence of a new COA creates a policy and operational void that will prevent ministry staff and federal officials from moving forward on many urgent ecological restoration/clean-up issues in the Great Lakes Basin. Therefore, the ECO urges MOE to work expeditiously with the federal government in finalizing a revised COA.

### Sales of Government Lands

In the 1998 and 1999/2000 annual reports, the ECO recommended that the Management Board Secretariat, MOE and the Ontario Realty Corporation (ORC) revise current practices relating to the sales of government lands, and bring them into compliance with *EBR* and *Environmental Assessment Act (EAA)* requirements, especially in regard to completing environmental study reports, carrying out adequate public consultation, and publishing annual reports on environmental activities. MOE responded that initiatives have been undertaken to strengthen the ministry's ability to monitor Environmental Assessment conditions of approval. MBS stated that during 2000/2001, ORC, which manages the disposition of government properties on its behalf, did not sell lands affecting Environmentally Significant Areas, including the Oak Ridges Moraine. ORC has established administrative procedures and training to improve its compliance with *EAA* requirements. The ECO commends ORC for retaining these lands and for carrying out its first major public consultation on a land

sale during this reporting period. The ECO is still waiting to see progress on annual reporting and on the commitment by MBS to provide public notice each year regarding which properties it intends to sell.

### Risk Management in Standard-setting

The ECO recommended that MOE provide more detail on how the risk management component of standard-setting will work, including how the public will be involved, and post this information on the Registry for public comment. MOE told the ECO that it will "hold public consultations on a proposed risk management framework that contemplates the use of options, incentives and enhanced enforcement to promote earlier and effective implementation of air standards." In March 2001, MOE posted a proposal on the Registry for a Risk Management Framework for the Air Standard Setting Process, providing a five-month public comment period, and in March 2001, posted a proposal to hold a public consultation on the replacement of the air dispersion models currently used in Ontario with more advanced U.S. Environmental Protection Agency models. The ECO will review the above initiatives once decision notices are posted on the Registry.

### *Ontario Energy Board Act (OEBA)* and *Electricity Act*

In response to the ECO's recommendation that the Ministry of Energy, Science and Technology prescribe relevant portions of the *OEBA* and the *Electricity Act* under the *EBR* so that environmentally significant regulations passed under these laws will be posted on the Registry for public comment, MEST has proposed to prescribe sections of the *OEBA* that provide authority for the Lieutenant Governor in Council to make regulations related to emissions reporting, environmental information disclosure, and the use of emissions credits or allowances to meet environmental standards. The ministry said it will work with MOE to post this proposal on the Registry for a 60-day public consultation period. The ECO commends MEST for its work in this area.

### MOE's Enforcement of MNR's Class EA for Timber Management

The ECO recommended that MOE respond to *EBR* applications regarding MNR's alleged contravention of the conditions of the Class EA for Timber Management on Crown Lands by doing thorough investigations, taking appropriate action with MNR, and reporting accurately to *EBR* applicants and the ECO on the findings. MOE stated that it will be reviewing MNR's annual reports in consultation with independent third-party reviewers. MNR reported that it will continue to implement and act on the findings of its June 1999 Forest Operations Compliance Program Review, and will be undertaking a follow-up review of the forest compliance and enforcement programs, to be completed by the end of fiscal 2001/2002, with implementation of the recommendations during 2002/2003. The ECO anticipates the opportunity to review MOE's findings on its review of MNR's annual reports upon completion.

### Waste Management Regulation and Hazardous Waste Facilities

Last year, the ECO recommended that MOE provide more detail on its current review of the waste management regulation and requirements for hazardous waste facilities, including the scope, status and expected completion date.

MOE reported that in November 2000 the ministry posted a decision on the Registry making Ontario's hazardous waste regulation the "toughest in its history." MOE's progress report to the ECO

implies that the new regulation marks the completion of its review of the waste management issues requested as part of a 1999 *EBR* application for review. This response fails to acknowledge that MOE committed in previous reports to look at ". . further initiatives, including land disposal restrictions," in addition to this regulation.

As pointed out in the discussion of the Safety-Kleen application for review (detailed on pages 140-141 of this report), even with the implementation of this new regulation, MOE has failed to address the need to tighten controls on land disposal of hazardous waste, to establish a hazardous waste prevention program, and to plan for alternative disposal options. In summary, MOE has not successfully implemented or responded to the ECO's Recommendation 13.

Second, ECO's Recommendation 14 asked that MOE clarify the relationship between its 1998 waste management regulatory reform proposals and the current review, and explain whether the ministry will be implementing the earlier proposal. In response, MOE reported that the two were separate initiatives and that the ministry is still currently reviewing individual components of the earlier proposal. MOE's piecemeal review of this initiative is very confusing, and MOE has failed to clarify to the public the relationship between the two proposals through the Registry. MOE's report also failed to detail if and how the earlier initiative is to be implemented.

### Abandoned Mines

The ECO recommended that the Ministry of Northern Development and Mines focus greater attention on the problem of abandoned mines and provide separate funding to address environmental issues, instead of combining funds for both health and safety concerns and environmental concerns. MNDM reported that environmental issues are not separate from health and safety concerns.

The ECO remains concerned with this approach because, as reported last year in its coverage of the request for investigation of the abandoned Kam Kotia mine, the ECO remains skeptical that the provincial government's allocation of $27 million province-wide to address both public safety *and* environmental concerns is adequate. (For an update on the Kam Kotia mine site rehabilitation, see pages 89-90 of this report.)

### Aggregate Resource Compliance Reporting Program

Recommendation 16 in last year's annual report asked that MNR review the effectiveness of its Aggregate Resource Compliance Reporting Program to determine how well inspections are being conducted by the different district offices and whether there are systemic problems with the program, and to develop remedies and put them in place.

MNR reported that it has made several commitments toward increasing field audits and reporting on the effectiveness of the program, and will complete the final report on this by March 31, 2002. An interim policy directive for site plan and record retention was provided in December 2000 to MNR and the Ministry of Transportation aggregate program staff. Direction will be formalized in the Aggregate Resources Program – Policies, Procedures and Bulletins policy manual.

The ECO commends MNR's efforts in this regard and will revisit this issue upon the release of MNR's final report on the program.

## Current and Sufficient Information on the Health of Ecosystems

Last year the ECO recommended that MOE and MNR develop current and comprehensive information that would allow for the development of scientifically defensible rationales for habitat protection activities and the identification of emerging ecosystem problems. The ministries have reported that together they have a number of initiatives under way.

For example, MOE reported that monitoring programs have been integrated with site specific information, and that together with MNR's information collection on forest health and fisheries and Land Information Ontario's standards for georeferencing data, the quality of ecosystem information available to provincial decision-makers has improved. The environmental SWAT Team has also been established to strengthen MOE's ability to gather and integrate site-specific information. MOE reported that it is committed to implementing additional activities in order to follow up on the statement in *Managing the Environment: Best Practices Review* by Valerie Gibbons that comprehensive environmental information is the cornerstone of effective environmental management.

It is unclear to the ECO at this point whether the directions of the Gibbons' report sufficiently address the concerns expressed in last year's ECO recommendations.

As part of implementing the Ontario's Living Legacy, MNR reports that the ministry is currently attempting to strengthen its inventory, monitoring and assessment programs for Parks and Conservation Reserves; lake trout and walleye fisheries; Great Lakes fisheries; and water quality/supply and water demand/use, especially during critical periods of low water conditions. The ministry also reports it is looking at new technologies to support this work, such as remote sensing, infrared techniques, and satellite imagery.

MNR is also fine-tuning its Inventory, Monitoring, Assessment and Reporting Project (IMAR). The ECO will continue to monitor the contributions of MNR and MOE to ensure current and sufficient information on ecosystem health is available to provincial decision-makers.

## Ecosystem Protection and Genetically Modified Organisms (GMO)

Recommendation 18 of last year's annual report suggested that the Ontario government establish a provincial advocate, independent of OMAFRA and MEST, for ecosystem protection capable of addressing GMO issues. Recommendation 19 suggested that the Ontario government should fund independent research on some of the fundamental ecological questions related to GMOs.

MEST, MOE and OMAFRA responded that the ministries do not see the need for such an advocate. Although they are taking an active role in researching the environmental implications of GMOs, these ministries believe the federal authority is best able to deal with this complex issue. A report by the federal Commissioner of Environment and Sustainability, however, contained some criticisms of the federal strategy for biotechnology. The ECO will continue to monitor this situation in 2001/2002.

## Ecosystem Fragmentation

Recommendation 20 in last year's report suggested that MNR, MMAH and MOE research the scope of ecosystem fragmentation in Ontario and select management options to slow down or even reverse this trend. Recommendation 21 stated that the ministries should assist municipalities to ensure that ecosystem fragmentation is adequately considered in land use planning decisions and that provincial interests in protecting natural heritage and functioning forest ecosystems are safeguarded.

MNR has reported that it is working on a number of initiatives, including enhanced models for identification and evaluation of woodland resources; the development of technical guidelines to assist planning authorities in identifying significant wildlife habitat; a strategic plan for wetlands that will support conservation and planning agencies in implementing the Provincial Policy Statement; and the development of enhanced performance indicators to improve MNR's ability to monitor changes to the quality of southern Ontario ecosystems. The review of the Provincial Policy Statement, required by the *Planning Act* by May 2001, will provide an opportunity to assess its effectiveness in protecting provincial interests, including the ecosystem and related natural heritage features and functions.

The Ministry of Municipal Affairs and Housing reported that it has recently completed the Greater Toronto Area Data Integration Project, which will be an analytical tool for viewing land use trends and issues across GTA boundaries. MOE stated that ongoing environmental monitoring programs, including the Groundwater Monitoring Network, are providing data on water quality, air quality, and the health of specific ecosystems. The ECO will continue to monitor whether these initiatives are addressing ecosystem fragmentation.

## Beyond the Recommendations

Some of the prescribed ministries provided updates on initiatives that were not the subject of specific ECO recommendations, but rather, on issues discussed in the body of the annual report.

1. **MBS** In response to the ECO's concern that MBS was considering cancelling the ***Green Workplace Program***, the ministry has advised the ECO that the program was not being cancelled but was being reassigned to the Shared Services Bureau. The ECO continues to monitor this arrangement. MBS has also reported that it has committed to support the start-up phase of the ***Black Creek Regional Transportation Management Association*** a project to facilitate transportation through improving commuting alternatives in the area.

2. **ORC** Although MBS/ORC has posted five information notices on the Registry in the 2000/2001 reporting year, and provided details on its Web site regarding its land sales marketing plan, internal administrative procedures, and the Class EA project's terms of reference, this does not meet MBS/ORC's commitment to post an annual notice to inform the public about its ***planned land sales*** before they are posted as active sales. In addition, the ECO noted, only a few sales have been posted on the Web site, which has been blank for several months at a time. For further information on ORC Registry activities, see the Supplement to this report.

3. **MMAH** The ministry reported that MMAH's three-phase ***streamlining*** plan "will increase the level of *EBR* awareness and Registry capacity among MMAH staff." The ECO will continue to monitor MMAH's use of the Registry to see whether the streamlining process has meant a marked improvement in the quality of ministry Registry notices.

4. **MTO** The ministry reported that in 2000 it embarked on a ***Transportation Needs Assessment Process*** that will integrate long-range network planning with the requirements of the EA process. (The ECO review of this project appears on page 61 of this report.) MTO also reported that it has supported MOE's Smog Alert Response Program for the Ontario Public Service, and has appointed a smog alert response co-ordinator to develop a smog alert plan for the ministry.

5. **MNR** MNR reported that in 2000/2001 it committed an additional $2 million in Ontario Living Legacy funding to enhance the work done on ***protecting species at risk***, and that it is proposing that approximately $10 million in funding will be allocated over a four-year period (2000/2004) to the provincial species at risk program. The ECO will continue to monitor the progress on this issue.

*For ministry comments, see pages 210-212.*

## Cooperation from Ontario Ministries

The Environmental Commissioner and his staff rely upon cooperation from staff in Ontario's provincial ministries to carry out the mandate of the ECO. Our staff are in constant contact with staff from the prescribed ministries with requests for information. Clear, prompt responses allow ECO reviews of the ministries' environmentally significant decisions to be conducted in an efficient and straightforward manner.

Section 58 of the *Environmental Bill of Rights* requires the ECO to include in the annual report to the Ontario Legislature a statement on whether or not prescribed ministries have cooperated with requests by the ECO for information.

Staff at the prescribed ministries are generally cooperative in providing information when it is requested. The 13 prescribed ministries and one agency (the Technical Standards and Safety Authority) each have one staff person who is designated as an *EBR* Coordinator or contact. Most of the day-to-day interaction between the ECO and the ministries occurs via these Coordinators, which are very important positions with respect to effective *EBR* implementation. The ECO urges ministries to notify our office immediately of any changes in the *EBR* Coordinator/contact position to ensure optimum communication and cooperation between the ECO and the prescribed ministries. The ECO also directly contacts ministry staff responsible for program delivery with specific, detailed information requests related to ministry programs.

The ECO makes monthly requests for information to the Ministry of the Environment's EBR Office through the manager, which saves time for staff at both ends. In 2000/2001, the EBRO staff have been consistently cooperative, and responses to ECO requests were thorough and informative.

The ECO usually contacts front-line staff at the Ministry of Natural Resources directly with specific requests for information. Individual MNR staff members have been very cooperative in supplying the information requested in a reasonable response time. MNR staff have on several occasions throughout this reporting year supplied ECO staff with supplemental information in addition to that which was requested. As reported in previous years, the *EBR* Coordinator with MNR makes every effort to assist the ECO.

The ECO reported in 1999/2000 that one ministry, the Management Board Secretariat, was unresponsive and uncooperative with the ECO's requests for information, and failed to submit its report on the activities MBS undertook to address previous ECO recommendations. In this reporting year 2000/2001, however, the ECO is pleased to report that MBS and the Ontario Realty Corporation staff made significant efforts to improve their cooperation with the ECO and have submitted a comprehensive *EBR* report for 2000/2001. Nevertheless, some long-standing commitments by MBS to the ECO – for example, to provide information to the ECO and the public about sales of government land – remained unfulfilled during the 2000/2001 reporting year.

While staff at the prescribed ministries almost always respond to requests for information in an accommodating manner, there were a few instances in the 2000/2001 reporting year that demonstrated uncooperativeness, on the part of two ministries in particular. Following ECO correspondence

with prescribed ministries informing them of our intended research issues for this year's annual report and informing each ministry that we would be in contact with ministry staff, the Ministry of Municipal Affairs and Housing responded by requesting that all future questions be put in writing and indicated that ministry staff would not answer any questions that had not been put in writing. Each inquiry was also to be responded to directly through a branch director. It is essential to note that most of the information sought by the ECO was in the form of general inquiry requests that could have potentially come from any member of the public. The written responses eventually received by the ECO from MMAH were not very helpful. MMAH's requirement that all ECO inquiries must be in writing frustrated the ECO's ability to access information promptly in the course of carrying out our legislated mandate to review ministry decision-making.

In a similar manner, the Ministry of Transportation's *EBR* Coordinator informed the ECO that ministry management required that all research inquiries from the ECO be directed through the Coordinator. This effectively cut off direct access and shut down previously open lines of communication between ministry operation staff and the ECO. The net result of this ministry request was that, once again, the ECO was left waiting for excessive periods of time for ministry responses.

It is very important for ECO staff in the course of their review work to have direct telephone access to front-line ministry staff with specific technical expertise. When telephone contact between ECO and ministry staff is discouraged or prevented, it becomes much harder for the ECO to provide the Legislature and the public with accurate, balanced and timely information in its annual report. Telephone interviews are much quicker, more efficient for both parties, and often more effective at clarifying complex issues than written correspondence. Ministry staff always have the opportunity to choose a mutually acceptable time for a telephone interview, to provide additional information in writing, and to refer ECO inquiries elsewhere if the need arises.

The ECO's ongoing work on compliance with the *EBR* often raises issues related to ministry cooperation. Under the rubric of the ECO's unposted decision project (see pages 33-36 of this report), we may send formal written inquiries requesting information on how the ministry determined the environmental significance of a proposal and whether it considered its Statement of Environmental Values. The letter may also ask the ministry to provide information on any other related public consultation activities undertaken by the ministry.

In some cases during 2000/2001, ministries provided poor responses to ECO inquiries about unposted decisions. For example, replies to ECO correspondence on MOE's elimination of its acid rain monitoring stations (summarized on page 35 of this report) and MNR's Confirmation Procedure for Areas of Natural and Scientific Interest (see page 39 of this report) were vague enough to warrant ECO follow-up with senior ministry management. In the case of MOE's acid rain monitoring program, the ministry failed to explain clearly how it considered its Statement of Environmental Values when making the decision on this program even after two specific inquiries from the ECO. The ECO trusts that, in the coming year, ministries will act in accordance with the spirit of the *EBR* by providing the ECO with clear and complete inquiry responses.

*For ministry comments, see page 213.*

## ECO Recognition Award

Once again this year, the Environmental Commissioner of Ontario wishes to recognize formally those ministry programs and projects that best meet the goals of the *EBR* or are considered best internal *EBR* practices. The ECO asked the 13 ministries prescribed under the *EBR* to submit programs and projects that met either of these criteria. Five ministries responded to our request, with a total of 10 projects for the ECO to consider. An arm's-length panel reviewed the submissions and suggested which one should be selected for our 2000/2001 Recognition Award.

Many worthwhile projects were submitted to the ECO this year. Four were particularly noteworthy. Three of these projects were not chosen, but deserve honourable mention. The Ministry of Municipal Affairs and Housing submitted the Greater Toronto Area (GTA) Data Integration Project, which introduced a GIS planning tool to provide GTA municipalities with a comprehensive view of all land use activities within their boundaries, improving their ability to consider the cumulative effects of planning and development. The Ministry of Natural Resources submitted the Madawaska River Water Management Review, which developed a water management regime to sustain and enhance the river's ecosystem, support sustainable uses and involve open and transparent decision-making. MNR also submitted the Ecological Sustainability Leadership Program, which endeavours to foster awareness and knowledge of the ecological sustainability of Ontario's natural resources for MNR staff and partner agencies, in support of MNR's strategic directions.

The recipient of this year's Recognition Award is the Ministry of Transportation. The ECO is pleased to recognize the work of MTO staff in taking an proactive approach to the protection of the endangered Eastern Massasauga Rattlesnake through an innovative program to mitigate habitat loss caused by highway construction, and to conduct unique follow-up monitoring.

MTO is currently expanding Highway 69, which runs through the Georgian Bay region. This region is one of four remaining native Canadian habitats for the Eastern Massasauga Rattlesnake. As a result of the environmental approval process, MTO made a commitment to protect the species during highway construction and developed a habitat management strategy in partnership with MNR.

During the 2000 construction season, MTO staff researched species characteristics, population dynamics, habitat and hibernation requirements. They also identified construction activities that could have an impact on snake habitat or population, and then incorporated design features into the highway construction such as culverts under the highway to provide the snakes with summer migration paths, and steep rocky slopes placed adjacent to the highway. Staff also created artificial habitats, including relocated tablerocks used by brooding female snakes. MTO provided training to all construction workers in the prime habitat area on how to respond to snake encounters. Throughout the construction period, any rattlesnakes encountered will be protected and relocated.

Following construction of the highway, MTO's mitigation strategies will be monitored to ensure ongoing protection of the rattlesnake population. This will include implanting 10 snakes with radio transmitters to record the movement of the population. MTO hopes that this continued monitoring will contribute to the ministry's understanding of the impacts of habitat fragmentation and the effectiveness of the mitigation strategies developed in this project.

# Part 8

## Developing Issues

In the following pages, the Environmental Commissioner outlines the background and context for several issues that have emerged from the ECO's routine surveillance of environmental activities in Ontario. These issues deserve attention because they may have significant environmental impacts and because they appear to be absent from the priority lists of the ministries responsible for managing those impacts. It is vital that ministries begin to focus some attention on these issues, that they develop and articulate their intended policy directions and provide opportunities for meaningful public input.

The Ministry of Education is responsible for the environmental education curricula in Ontario schools, but the ministry is currently not prescribed under the *Environmental Bill of Rights*. Even though environmental education is a critical prerequisite to good environmental decision-making at all levels, there is no opportunity for public scrutiny or input into the quality of environmental education provided to Ontario students.

Three Ontario ministries (along with numerous federal agencies) have some involvement in the regulation or promotion of the growing fish farming industry. However, the industry operates with little regulation, and the policy intentions of the overseeing ministries appear to be in conflict with each other.

Remnant natural areas in southern Ontario pose a special challenge for organizations trying to preserve the biodiversity of the province. Outright public purchase of selected land parcels is an important protection tool in this region where most land is already privately owned. Although the Ministry of Natural Resources is involved in a number of land acquisition programs, a well-coordinated overall strategy for southern Ontario is needed to knit these programs together with other natural heritage goals and acquisition programs of the provincial government.

## Prescribing the Ministry of Education under the EBR

In the time since the *Environmental Bill of Rights* was enacted in early 1994, the Ministry of Education has not been subject to the Act. In late 1999, the Environmental Commissioner received an application for a review of the need to add the Ministry of Education to the 13 provincial ministries currently subject to the *EBR*. The applicants suggested that if this ministry were prescribed under the *EBR*, the public would be able to request a review of the ministry's decision to remove Environmental Science from Ontario's secondary school program. (For a full description of this application, see pages 188-189 in the Supplement to this report.)

The Ministry of the Environment, which administers the *EBR*, agreed to undertake the review. MOE's review took a year to complete, and concluded that the purposes of the *EBR* would not be furthered by making the Ministry of Education subject to the Act. MOE's rationale was that, in practice, few if any of the policies, Acts or regulations of the Ministry of Education would need to be posted on the Registry, nor would they be open to review under the *EBR*. MOE also noted that the public already has an existing right to send letters to the Minister of Education, requesting changes in policy decision.

The ECO does not agree with MOE's conclusions. The Ministry of Education is similar to a number of other currently prescribed ministries which do make some decisions that can have an effect on the environment, even though their core mandate is not environmental protection. As well, the right to mail a letter to a minister is not a reasonable replacement for the right to request a review under the *EBR*. The *EBR* applications process is a much more transparent, public process including timelines, oversight by the ECO and accountability to the Ontario Legislature and the public. Furthermore, if the Ministry of Education became subject to the *EBR*, it would have to develop a Statement of Environmental Values and take it into account whenever the minister and ministry staff made environmentally significant decisions – for example, future decisions on curriculum requirements. The ECO concludes that there would be significant advantages in having the Ministry of Education prescribed under the *EBR*.

The Ministry of Education has a key role in helping to ensure that Ontario students receive a sound environmental education, including a solid grounding in the underlying science and technology issues. Education on environmental issues is important for the following reasons:

1. There is a critical need for Ontario's public to understand complex environmental issues that affect their day-to-day lives. The *EBR* is predicated on the value of informed public comment on government decision-making.
2. Most of Ontario's population now live in urban locations, and children in urban settings have far less contact with the natural environment on an everyday basis than children of previous generations. They have less daily access to wild areas and wildlife, are much less familiar with their local natural history, and spend much more time focused on indoor activities. Without an appreciation of our natural heritage, new generations may not see the value of protecting it. Therefore, it is important that some of this education be provided through the formal school system.
3. Since our habits and lifestyle choices as individuals have an enormous cumulative environmental impact, it is critical that good habits be encouraged early on in areas such as energy and water conservation, pollution prevention and protection of biodiversity. There are many indications that our current consumption patterns are leading to environmental degradation. Thus, if Ontario's children simply adopt the habit of their parents, the degradation is bound to continue.
4. Ministries are implementing an increasing number of environmental monitoring programs that rely on volunteers and volunteer groups to collect and report data on parameters as diverse as cottage lake water quality and bird and amphibian populations. In a similar trend, in April 2001, MOE established a pollution hotline to collect tips from the public on pollution problems. All these approaches rely on a public that is educated on environmental matters.
5. In the past five years, the Ministry of Education has assumed a stronger role in curriculum development, partly because the ministry's Education, Quality and Accountability office administers standardized testing of children at several grade levels. Therefore, the ministry has also taken on a more direct responsibility for curriculum content and delivery, including environmental curriculum.

If the Ministry of Education were prescribed under the *EBR*, there would be improved transparency on how the ministry is furthering environmental education in Ontario. For example, the public would have the right to request improvements to the ministry's approach to environmental curriculum. The public might also want to ask for monitoring and reporting on how effectively schools are teaching existing environmental components of the curriculum. Such requests from the public, as well as the ministry's responses, would be reviewed in the ECO's annual report to the Ontario Legislature and to the public. Unfortunately, there is currently no transparent mechanism to hold the Ministry of Education accountable for environmental education.

*For ministry comments, see page 213.*

## Recommendation 13

**The ECO recommends that:**

MOE re-examine the need to prescribe the Ministry of Education under the *EBR*.

The Ministry of Education has a key role in helping to ensure that Ontario students receive a sound environmental education, including a solid grounding in the underlying science and technology issues. Education on environmental issues is important for the following reasons:

1. There is a critical need for Ontario's public to understand complex environmental issues that affect their day-to-day lives. The *EBR* is predicated on the value of informed public comment on government decision-making.
2. Most of Ontario's population now live in urban locations, and children in urban settings have far less contact with the natural environment on an everyday basis than children of previous generations. They have less daily access to wild areas and wildlife, are much less familiar with their local natural history, and spend much more time focused on indoor activities. Without an appreciation of our natural heritage, new generations may not see the value of protecting it. Therefore, it is important that some of this education be provided through the formal school system.
3. Since our habits and lifestyle choices as individuals have an enormous cumulative environmental impact, it is critical that good habits be encouraged early on in areas such as energy and water conservation, pollution prevention and protection of biodiversity. There are many indications that our current consumption patterns are leading to environmental degradation. Thus, if Ontario's children simply adopt the habit of their parents, the degradation is bound to continue.
4. Ministries are implementing an increasing number of environmental monitoring programs that rely on volunteers and volunteer groups to collect and report data on parameters as diverse as cottage lake water quality and bird and amphibian populations. In a similar trend, in April 2001, MOE established a pollution hotline to collect tips from the public on pollution problems. All these approaches rely on a public that is educated on environmental matters.
5. In the past five years, the Ministry of Education has assumed a stronger role in curriculum development, partly because the ministry's Education, Quality and Accountability office administers standardized testing of children at several grade levels. Therefore, the ministry has also taken on a more direct responsibility for curriculum content and delivery, including environmental curriculum.

If the Ministry of Education were prescribed under the *EBR*, there would be improved transparency on how the ministry is furthering environmental education in Ontario. For example, the public would have the right to request improvements to the ministry's approach to environmental curriculum. The public might also want to ask for monitoring and reporting on how effectively schools are teaching existing environmental components of the curriculum. Such requests from the public, as well as the ministry's responses, would be reviewed in the ECO's annual report to the Ontario Legislature and to the public. Unfortunately, there is currently no transparent mechanism to hold the Ministry of Education accountable for environmental education.

*For ministry comments, see page 213.*

## Recommendation 13

**The ECO recommends that:**

MOE re-examine the need to prescribe the Ministry of Education under the *EBR*.

# Cage Aquaculture

## What is Aquaculture?

Aquaculture is the farming or culture of fish, shellfish and aquatic plants in man-made or natural bodies of water. While most fish produced through aquaculture are destined for human consumption, other products may include bait fish, ornamental or aquarium fish, and aquatic animals used to increase natural populations for sport fishing.

Aquaculture is an emerging industry in Ontario and Canada. It is recognized by the federal government as a growing source of employment, and it offers the possibility for social and economic improvement in communities with limited economic alternatives. The Canadian aquaculture industry employs more than 14,000 people. Yet, in terms of world standards, Canada is a relatively small producer, with an estimated 0.3 per cent of the world's aquaculture production. However, it is a fast-growing industry driven by two forces. First, the growing global population has spurred a strong increase in demand for fish and seafood. Second, most experts agree that wild fisheries catches have peaked and begun to decline.

Ontario's commercial aquaculture industry has also grown considerably since its inception in 1962. As of 1999, the industry was valued at approximately $60 million, producing over 4,000 tonnes of fish annually, 95 per cent of which is rainbow trout. Annual growth continues to increase, and follows a general trend which began in 1985, when both the number of farms and overall production output started to expand (though growth after 1996 has slowed somewhat, according to the Ministry of Natural Resources). Presently, most aquaculture facilities in Ontario are located in southern and central Ontario, but there has been recent expansion into Northern Ontario, particularly in the waters of Georgian Bay. Future expansion is expected to continue, with an increasing concentration of farms anticipated along the shores of the Great Lakes, particularly Lake Ontario and Lake Huron, and Georgian Bay.

## Cage Culture

There are several different types of aquaculture operations. Man-made operations grow fish in land-based ponds, long, rectangular concrete raceways or circular tanks. Water operations, commonly known as "cage culture," consist of net pens or cages in ponds, rivers, freshwater lakes and bays, or open oceans. These nets are fashioned in the form of large, floating bags which contain the fish but allow water and waste to flow freely in and out. The key criteria for caged aquaculture site selection include a sheltered location, deep water, and good circulation. Most of the recently established large cage culture operations are in the Georgian Bay area, primarily centred in the North Channel area near Manitoulin Island. As of 1998, the cage cultures in this area accounted for approximately 60 per cent of the total provincial output of farmed trout.

## The Impacts of Cage Cultures

Aquaculture can have a negative impact on the natural water body where it is located. As with other forms of intensive animal production, intensive aquaculture systems can produce large quantities of polluting wastes. The water quality impacts of land-based aquaculture operations are generally easily managed since the water from these operations is released at one point. However, with cage cul-

ture operations, anything that is added to or released from the cages directly enters the water body. Caged aquaculture operations do not treat their wastes and instead use the water body itself and the aquatic biota to treat their wastes through dispersion, dilution and decomposition. This method has consequences similar to the practice of building taller smokestacks so that industrial air emissions can be carried away by the wind. While locating cage cultures in water with strong currents does quickly dilute wastes and prevent some of the short-term harm, the cumulative effects of many cage culture facilities on the ecosystem need to be considered and are of some concern.

In cage culture facilities, fish wastes and uneaten fish feed constantly fall directly from the cage and sink to the same part of the body of water in which it is located. This leads to an increased levels of organic matter and the nutrients phosphorous and nitrogen in the immediate area surrounding the cage. The organic matter is decomposed by bacteria. This process consumes a great deal of oxygen, creating a high "BOD" (biological oxygen demand) and leading to oxygen depletion in the area which stresses and may kill native fish and other organisms. The increased levels of nutrients can also stimulate the growth or blooms of excessive algae in the local area. This can lead to degradation of benthic (bottom) communities, surface scums, elevated total suspended solids and reduced water clarity, strong odours, excessive weed growth, and a rapid change in water colour. When there are multiple cages in the same body of water, each causing these negative impacts, the cumulative effects of the cages can create the same results throughout the entire body of water. MNR reports that the aquaculture industry has taken steps such as developing low pollution feed and effective feeding practices to reduce this impact.

An example of the damage that cage culture operations can cause occurred in 1997 in some of the bays in the North Channel of Lake Huron, near Manitoulin Island. There are many cage culture facilities in this area, and in the mid-1990s, the public began expressing concerns regarding the expanding industry. MOE inspected two aquaculture operations in the area in 1997, one of which was the LaCloche site. MOE found that the dissolved oxygen levels were extremely low throughout the bay where the LaCloche site was located. In fact, there was absolutely no oxygen present at all in the deeper parts of the water over an extremely large area (250 ha). The water also had high phosphorous levels and algae. As a result, fish were not able to survive in the deep water of the bay and were forced to move to other areas of Lake Huron.

The biodiversity implications of aquaculture are another cause for concern. This includes the long-term impacts of escaped non-wild varieties on ecosystem health, disease introduction and exacerbation, and the development of antibiotic-resistant disease organisms. Netpens and cages are particularly susceptible to the escape of very large numbers of fish when damaged by storms, boats, and poor maintenance, and through accidents and everyday "leakage." Introduced varieties can harm

natural ecosystems by interbreeding with native wild populations, thereby decreasing biodiversity and possibly breaking up local genetic adaptations that have developed for survival in that area. This risk is magnified when the farmed species are genetically modified, that is, modified scientifically by transferring genetic material, at the molecular level, from one species to another and thereby creating a hybrid species that would never have evolved under natural circumstances. Genetically modified organisms are created to produce traits that are economically important for the industry, such as fish that grow more quickly, do well in caged facilities, grow to be very large, and are more resistant to disease and lower temperatures.

## Regulating the Aquaculture Industry

In Ontario, there are approximately eight agencies and 20 pieces of legislation that are potentially relevant to aquaculture. The most important of these is the *Fish and Wildlife Conservation Act*, which is administered by the Ministry of Natural Resources. This Act states that anyone engaging in aquaculture must obtain a licence and can culture only those species of fish specified in O. Reg. 664/98, Fish Licensing. An aquaculture licence authorizes the licence holder to culture those fish specified in the licence for the locations set out in the licence, and to buy, sell and transport those fish. Other key provincial government agencies involved in regulating aquaculture are the Ministries of the Environment and Municipal Affairs and Housing, and the local conservation authority and municipality.

There are another 17 departments of the federal government that have responsibility for some aspects of the aquaculture industry. The Department of Fisheries and Oceans (DFO) regulates matters dealing with fish disease through the Fish Health Protection Regulations. Agriculture and Agri-Food Canada regulate fish vaccines, fish feed and feed additives, and the marketing and transport of fish once they are sold. Finally, Health Canada regulates the safety and use of drugs used in fish. There are also many government-run groups and stakeholder organizations that review and comment on the aquaculture legislation.

The ECO notes that land-based fish culture must comply with certain mandatory environmental requirements, whereas for the cage culture industry, the same requirements may or may not be a condition of their licences. For example, cage culture licences may include standards for water quality surrounding the cage as a condition of the licence. O. Reg. 664/98 specifies that the holder of an aquaculture licence that allows a cage culture in public water must only test and maintain the water quality and report the results to the ministry as required by the licence. Instead, land-based aquaculture facilities must comply with treatment and water quality standards. These typically have to obtain certificates of approval from MOE for the treatment of wastes from the operations and for their release into water bodies so that negative impacts are minimized.

In fact, the Ontario Aquaculture Research and Services Co-ordinating Committee (OARSCC) promotes cage culture for this very reason. OARSCC is an expert committee and clearing house providing combined industry-university-government reviews and opinions on proposed policies, regulations, research proposals and projects concerning aquaculture. It has members representing the Ontario Ministry of Agriculture, Food and Rural Affairs, MOE, MNR, DFO, industry and the University of

Guelph. In its annual report, entitled "Annual Research and Service Priorities for Ontario Aquaculture 2000," OARSCC stated the following:

> The Agriculture Ministry's advocacy for the [aquaculture] industry is becoming essential to hopes of continued growth in the face of increasing regulatory pressure from the Ontario Ministry of Natural Resources and the Ontario Ministry of the Environment. . . . The cage sector of the aquaculture industry arguably holds the most promise for significant growth, since inland development has been effectively suppressed by regulators. Currently, the combined effort by the Ministry of Natural Resources and the Ministry of the Environment to control cage operators through conditions imposed on their licences to culture fish threatens to stifle growth in that sector also.

This conflicting approach by Ontario's ministries will do little to improve the state of Ontario's aquatic ecosystems. However, the ministries do impose some conditions on the aquaculture licenses of cage culture facilities, such as those requiring the monitoring and maintenance of water quality around the cages. MNR is also currently developing new policies on aquaculture, some of which deal with minimizing the risk of escape of cultured fish into the natural environment (see Registry posting PB00E6001.) Also relevant is the ECO's review in the Supplement to this report of a decision (RA00E0017) declaring that the construction, operation and maintenance of existing fish culture stations in Ontario are not subject to approval under the *Environmental Assessment Act*.

## Reducing the Environmental Impact of Cage Culture

There are ways of minimizing the negative impacts that cage culture facilities have on their surrounding waters. The siting and design of the facilities can be used to minimize water quality impacts by ensuring that facilities are located far enough apart in water bodies of sufficient size and that they have greater water circulation rates. Moreover, management practices such as cage rotation, varying feeding regimes, and farming the fish at lower densities can also play an important role.

New methods of minimizing the environmental impacts of aquaculture facilities are constantly being developed. Presently, cages are the most harmful form of aquaculture facilities in terms of nutrient pollution and impacts on biodiversity, since they externalize to the environment many of the adverse effects of operating the facility. However, cages are not necessary to aquaculture: the fish species now raised in cages can also be raised in other types of facilities, such as man-made ponds, raceways and tanks. Since the aquaculture industry in Ontario is expected to continue to increase, it is essential that government ministries and agencies work together to ensure that the aquaculture industry is sufficiently regulated to protect the environment.

*For ministry comments, see pages 214.*

# A Review of Ontario's Land Acquisition Programs

## Introduction

Land set aside and kept reasonably free from human disturbance is a critical element for the health and protection of many ecosystems. Protected land can help ensure the survival of sensitive or rare species, allow forests to mature, and permit a host of other natural functions to occur. For these and many other reasons, the Province of Ontario, in conjunction with conservation groups, municipalities and the public, is using a number of approaches, including land acquisition, to set land aside for ecological or scientific purposes. For ecosystem protection, the shape and connectedness of a land area, and its proximity to other natural features such as lakes, cliffs and rivers, are critical. Ecosystems rarely fit the rectangular property boundaries that have been imposed on the natural landscape by humans. Plants and animals often require a variety of topographical, hydrological and biological features for nesting, feeding or migration purposes.

Conserving appropriately sized, ecosystem-based land masses is still a manageable undertaking in northern Ontario, where most land is still owned by the Crown. A practical method for protecting important natural heritage in this region is to establish parks and conservation reserves, which for the most part exclude resource extraction. In central Ontario, a great deal of land is also in Crown ownership, and park development or expansion has also taken place there. However, central Ontario is increasingly subject to a number of land use pressures, including forestry, mining, recreation, agriculture and urban growth. Recently, Ontario's Lands for Life process established or expanded 378 parks and conservation reserves in northern and central Ontario, after extensive public consultation (see "Ontario's Living Legacy – Land Use Strategy" in the 1999/2000 ECO annual report)

In southern Ontario, where most land is privately owned, establishment of protected areas is much more difficult. Land use planning is for the most part under municipal control, but municipalities face intense pressure to rezone natural areas to permit development. When municipalities try to protect natural areas by limiting development, their decisions are likely to be appealed to the Ontario Municipal Board (see pages 132-134 on the Oak Ridges Moraine and pages 116-119 on Marshfield Woods). Direct acquisition of natural areas is also difficult because land in the urban shadow is typically very expensive. Nevertheless, the province is committed to a goal of protecting 12 per cent of its lands and waters, as a signatory of the Canadian Biodiversity Strategy. This commitment is repeated in the Ontario's Living Legacy (OLL) initiative, and has been achieved in the parts of the province covered by OLL. However, the Ministry of Natural Resources has not articulated how this goal applies to the landscape of southern Ontario, where only 2 per cent of the land mass is currently protected.

Protecting natural areas in southern Ontario takes on a special importance for two reasons: First, it is one of the most biodiverse regions of Canada. Second, few of its natural areas remain because its land mass has been extensively developed for urban, agricultural and transportation purposes.

Regrettably, the extent of development in southern Ontario has led to a great deal of ecosystem fragmentation, in which small parcels of an ecosystem are separated from similar landscape. Protecting these remnant parcels is now the only natural means available for preserving southern Ontario's biodiversity, as the majority of these ecosystems have already been lost. This is particularly

true for the deciduous forest region – the southernmost forest zone in Canada – which contains the provincially rare Carolinian flora. Protecting the remaining small fragments of ecosystems in southern Ontario deserves the attention of provincial protection strategies, along with assembling and protecting larger, more notable sites.

## *EBR* Applications

In March 2000, the ECO received two applications for review that cited the need for a strategy to protect the Oak Ridges Moraine. Among other things, the applicants requested creation of a provincial land acquisition program to purchase key properties along the Oak Ridges Moraine. Partly in response to issues raised by this application, the ECO has begun a review of Ontario land acquisition programs that are designed to protect significant natural areas, especially in southern Ontario.

## Program Review

Our preliminary review of four natural heritage land acquisition programs currently in place in Ontario has produced some initial observations:

**Natural Areas Protection Program (NAPP)**

NAPP is a program launched in April 1998 by the Ministry of Natural Resources that grew out of the previously existing Niagara Escarpment Land Acquisition and Stewardship Program (NELASP). Lands near or on the Niagara Escarpment, and near or adjoining Rouge Park and Lynde Marsh (both just east of the City of Toronto), are currently the focus of this program. To disperse NAPP's land acquisition funds of $5 million annually (for four years), MNR enters into agreements with partner organizations, e.g., conservation authorities, preferably on a matched-funding basis. Before entering into an agreement involving land acquisition projects, MNR evaluates applications against the program's guidelines (which are available on its Web site). Ten per cent ($500,000) of NAPP's annual budget is directed to small-scale capital projects (e.g., trail markers) on public lands.

When NAPP replaced NELASP, MNR expanded its focus beyond the Niagara Escarpment to include the Rouge and Lynde Marsh areas because these areas were considered to be threatened by development and were viewed as being critical for protection. The program's new directions were not subject to public consultation under the *EBR* because MNR considered the decision to be part of the provincial Budget Statement, and thus exempt from *EBR* public comment provisions. MNR now appears to be remodeling the program as the Ecological Land Acquisition Program (ELAP). MNR is also indicating that land acquisitions under NAPP/ELAP are somehow

part of the Ontario's Living Legacy program, even though the extensive planning and public consultation for OLL was only for Crown lands, not private, and was restricted to northern and central Ontario. And it is unclear what changes, if any, have been made to NAPP/OLL as a result of these new directions. Finally, MNR indicates that a policy proposal for the new $10 million Ecological Land Acquisition Program (ELAP), which is to replace the Natural Areas Protection (NAPP), will be posted on the Environmental Registry for comment when available.

**Community Conservancy Program (CCP)**

The goal of CCP is to secure lands to a total value of $6 million. At least half the lands are to be provincially significant in nature. Begun in 1999, the program operates until March 2002 under a Memorandum of Understanding between MNR and the Nature Conservancy of Canada (NCC). In pursuit of the program's goal, MNR provides NCC with $300,000 annually for land securement, which is expected to be matched on a 6:1 basis. The funds are employed by NCC primarily to enter into conservation easements (see the discussion of conservation easements below). A small amount of this funding is also directed to a network of local land trusts. MNR's funding for this

## The Role of Conservation Easements in Preserving Natural Heritage

Conservation easements (CEs) are arrangements in which natural heritage protection is established by agreement between a government agency or a non-governmental organization and a landowner, but lands are not purchased in the transaction.

Conservation conditions can be written into property deeds and registered with a Land Titles Office as a means of perpetuating the arrangement. Since easements place controls on a property's use, and are usually arranged in perpetuity, any future landowners must be prepared to adopt the obligations of the easement. Often, governments offer a tax benefit as an incentive to encourage a landowner to enter into an easement agreement (Ontario's Conservation Land Tax Incentive Program, for example, offers such incentives). Easements have the obvious advantage of being less expensive than purchasing properties outright, while still affording some protection to natural heritage properties. In 1994, there were amendments to the *Conservation Land Act* to allow conservation bodies (e.g., Crown agencies, municipalities, land trusts and others) to hold and enforce conservation easements.

Because CEs are based on placing conditions on private property, issues could arise that might not arise from direct land ownership by a public conservation agency. These include access to and inspection of the property; verification of whether or not special conditions are being met; whether a third-party agency exists that has the authority and resources to audit these agreements, which are now becoming numerous in Ontario; and the long-term viability of the agreements.

Protecting properties by conservation easements can help to build wildlife corridors and trail systems and protect remnant habitats. Such arrangements are, however, generally less suitable for establishing a major public access park or recreational area, since easement properties are typically small and bounded by private property.

part of the Ontario's Living Legacy program, even though the extensive planning and public consultation for OLL was only for Crown lands, not private, and was restricted to northern and central Ontario. And it is unclear what changes, if any, have been made to NAPP/OLL as a result of these new directions. Finally, MNR indicates that a policy proposal for the new $10 million Ecological Land Acquisition Program (ELAP), which is to replace the Natural Areas Protection (NAPP), will be posted on the Environmental Registry for comment when available.

**Community Conservancy Program (CCP)**

The goal of CCP is to secure lands to a total value of $6 million. At least half the lands are to be provincially significant in nature. Begun in 1999, the program operates until March 2002 under a Memorandum of Understanding between MNR and the Nature Conservancy of Canada (NCC). In pursuit of the program's goal, MNR provides NCC with $300,000 annually for land securement, which is expected to be matched on a 6:1 basis. The funds are employed by NCC primarily to enter into conservation easements (see the discussion of conservation easements below). A small amount of this funding is also directed to a network of local land trusts. MNR's funding for this

## The Role of Conservation Easements in Preserving Natural Heritage

Conservation easements (CEs) are arrangements in which natural heritage protection is established by agreement between a government agency or a non-governmental organization and a landowner, but lands are not purchased in the transaction.

Conservation conditions can be written into property deeds and registered with a Land Titles Office as a means of perpetuating the arrangement. Since easements place controls on a property's use, and are usually arranged in perpetuity, any future landowners must be prepared to adopt the obligations of the easement. Often, governments offer a tax benefit as an incentive to encourage a landowner to enter into an easement agreement (Ontario's Conservation Land Tax Incentive Program, for example, offers such incentives). Easements have the obvious advantage of being less expensive than purchasing properties outright, while still affording some protection to natural heritage properties. In 1994, there were amendments to the *Conservation Land Act* to allow conservation bodies (e.g., Crown agencies, municipalities, land trusts and others) to hold and enforce conservation easements.

Because CEs are based on placing conditions on private property, issues could arise that might not arise from direct land ownership by a public conservation agency. These include access to and inspection of the property; verification of whether or not special conditions are being met; whether a third-party agency exists that has the authority and resources to audit these agreements, which are now becoming numerous in Ontario; and the long-term viability of the agreements.

Protecting properties by conservation easements can help to build wildlife corridors and trail systems and protect remnant habitats. Such arrangements are, however, generally less suitable for establishing a major public access park or recreational area, since easement properties are typically small and bounded by private property.

program comes from the sale of Crown lands through a program known as the Strategic Lands Initiative (SLI).

The ECO is not aware of public consultation that specifically evaluated the Community Conservancy Program. Neither the CCP nor the SLI were the subject of an *EBR* policy proposal posted on the Environmental Registry for public comment purposes, although information notices on SLI have been posted by MNR on the Registry.

**Eastern Habitat Joint Venture (EJHV)**

MNR and the Ontario Ministry of Agriculture, Food and Rural Affairs are partners in the Eastern Habitat Joint Venture, which is one of 14 regional partnerships of the North American Waterfowl Management Plan, an agreement between Mexico, the United States and Canada to conserve, restore and enhance wetlands and to restore waterfowl populations to 1970s levels. Other partners include federal agencies and non-governmental organizations. To secure and enhance habitat under this program, MNR has transferred from $250,000 to $500,000 annually for at least 15 years to the non-governmental organizations of the partnership, which use their own, plus federal contributions, as matching funds to obtain U.S. funding. As MNR is only one of the funding agents in the partnership, the ministry's funds help leverage other contributions, enlarging the total funds available. According to MNR, its contribution over 15 years of participation has amounted to $5 million, while the total value of partnership projects in Ontario over the same time was estimated to be $65 million. The ECO was unable to ascertain what portion of EHJV funding contributes specifically to land acquisition, only that EHJV partners have decided to purchase outright only certain properties with very high ecological values. For other properties, the partners apply a range of stewardship approaches, supported by legally binding conservation agreements with owners. To date, partner meetings have been held on the overall direction of the initiative, and some specific projects under the partnership have been posted on the Environmental Registry.

**Ontario Parks Legacy 2000 (OPL 2000)**

In 1996, Ontario Parks, the agency within MNR that manages Ontario's network of provincial parks, contracted the Nature Conservancy of Canada under the five-year Ontario Parks Legacy 2000 program, to acquire ecologically significant areas "to help complete a system of parks and other protected areas in Ontario in celebration of the new Millennium." Funding of $1.5 million for this program also comes from public land sales through MNR's Strategic Lands Initiative. Most of the sites selected, which will be classed Provincial Nature Reserves, are found in southern Ontario. Ontario Parks will be responsible for the protection and management of all sites. However, under a special custodial agreement, NCC may retain title of some properties.

## Snapshot of Four Land Acquisition Programs

| Program | Principle Targets |
|---|---|
| Natural Areas Protection | Niagara Escarpment, Rouge Park, Lynde Marsh |
| Eastern Habitat Joint Venture | Water fowl habitat province-wide |
| Community Conservancy Program | At least 50% of lands acquired to be provincially significant |
| Ontario Parks Legacy 2000 | Ecological areas targeted on a scientific basis. Sites are mostly in south-central Ontario, and include ANSIs, wetlands. |

### Recent Announcements

**In November 2000, the province announced $102.55 million in funding under the banner of the Ontario's Living Legacy program to be spent on a number of mostly existing, park-related programs. This announcement included a $20 million funding commitment for land acquisition in the province – $10 million under the Natural Areas Protection Program to cover 2000 to 2002, previously announced in 1998, but also a new $10 million commitment under NAPP's successor program, ELAP, to run from 2002 to 2004. It appears that the remaining components of this announcement do not involve land acquisition directly, nor do they include any new funding dedicated to land acquisition.**

**Also in 2000, MNR came out with a new procedure for identifying areas of natural and scientific interest (ANSIs) that may have implications for land acquisition processes (see page 39 for more information on this topic). ANSIs are among the program targets of Ontario Parks Legacy 2000 and NAPP. The new procedure will help MNR staff decide which lands and habitats will be selected for this designation in the future in Ontario.**

### Summary

**The ECO's preliminary review has found that MNR either leads or is involved in a number of land acquisition programs, with diverse histories and a variety of goals, processes and criteria. These programs acquire or protect lands through purchase, agreement, establishment of conservation easements and other methods. While programs exist, representing many habitats and ecosystems, we note that gaps also exist in the delivery of this overall program area – notably, in consulting the public about the programs and in terms of coverage of ecosystems.**

**Public consultation on most of these programs has been quite rudimentary. The reasons for this are not clear but may stem from the fact that MNR usually shares program management with partners such as environmental non-governmental organizations and conservation authorities. As a result, these programs are not widely publicized nor understood by the public. Further, none of the programs developed after April 1995, when the proposal notice requirements of the *EBR* began to apply to most ministries, was posted on the Registry as a regular policy proposal for public comment.**

As for gaps in program coverage of ecosystems, Ontario's Living Legacy does not extend into southern Ontario, and NAPP notably excludes the Oak Ridges Moraine, virtually all areas of Carolinian flora and many other parts of southern Ontario. Furthermore, it appears that the programs do not adequately capture the lands and habitat identified in the natural heritage policies of the Provincial Policy Statement, particularly threatened species habitat, fish habitat, significant woodlands and valleylands, and significant wildlife habitat. Given southern Ontario's rich biodiversity and extreme development pressures, it seems particularly important to clarify how the goal of protecting 12 per cent of lands and waters applies to southern Ontario.

A coherent, province-wide, scientifically sound framework explaining the rationale and direction of each program would help to clarify this topic and assist the public in comprehending it. Furthermore, such a framework would permit comparison of the programs, and illuminate the relationship of one program to another (e.g., the Natural Areas Protection Program and/or Ecological Land Acquisition Program and their relation to Ontario's Living Legacy program). The framework would also clarify how each program applies to lands with provincial, regional or local significance, and allow the ministry to measure and report on progress.

Land acquisition on its own is not sufficient to protect the natural heritage of acquired properties. Land and its flora and fauna can be susceptible to many kinds of damaging impacts, even simply by accidental intrusion by humans into sensitive landscapes. For these reasons, MNR and its partner organizations should ensure that sufficient resources are allocated to ongoing monitoring and stewardship of acquisitions.

The ECO recognizes that other tools beyond outright land acquisition to protect privately owned natural areas also exist, including conservation easements and tax incentive programs. We also observe that Ontario ministries are involved in a multi-year program to sell off a substantial amount of provincial land holdings that are deemed to be surplus to provincial interests. The ECO will continue to monitor how MNR manages its land acquisition and disposition programs.

*For ministry comments, see page 214-215.*

## Recommendation 14

**The ECO recommends that:**

MNR create a cohesive framework for land acquisitions programs in order to clarify how these programs will protect the ecosystem and natural heritage features of the landscape.

As for gaps in program coverage of ecosystems, Ontario's Living Legacy does not extend into southern Ontario, and NAPP notably excludes the Oak Ridges Moraine, virtually all areas of Carolinian flora and many other parts of southern Ontario. Furthermore, it appears that the programs do not adequately capture the lands and habitat identified in the natural heritage policies of the Provincial Policy Statement, particularly threatened species habitat, fish habitat, significant woodlands and valleylands, and significant wildlife habitat. Given southern Ontario's rich biodiversity and extreme development pressures, it seems particularly important to clarify how the goal of protecting 12 per cent of lands and waters applies to southern Ontario.

A coherent, province-wide, scientifically sound framework explaining the rationale and direction of each program would help to clarify this topic and assist the public in comprehending it. Furthermore, such a framework would permit comparison of the programs, and illuminate the relationship of one program to another (e.g., the Natural Areas Protection Program and/or Ecological Land Acquisition Program and their relation to Ontario's Living Legacy program). The framework would also clarify how each program applies to lands with provincial, regional or local significance, and allow the ministry to measure and report on progress.

Land acquisition on its own is not sufficient to protect the natural heritage of acquired properties. Land and its flora and fauna can be susceptible to many kinds of damaging impacts, even simply by accidental intrusion by humans into sensitive landscapes. For these reasons, MNR and its partner organizations should ensure that sufficient resources are allocated to ongoing monitoring and stewardship of acquisitions.

The ECO recognizes that other tools beyond outright land acquisition to protect privately owned natural areas also exist, including conservation easements and tax incentive programs. We also observe that Ontario ministries are involved in a multi-year program to sell off a substantial amount of provincial land holdings that are deemed to be surplus to provincial interests. The ECO will continue to monitor how MNR manages its land acquisition and disposition programs.

*For ministry comments, see page 214-215.*

## Recommendation 14

**The ECO recommends that:**

MNR create a cohesive framework for land acquisitions programs in order to clarify how these programs will protect the ecosystem and natural heritage features of the landscape.

# Part 9

Office of the
Provincial Auditor
of Ontario

Bureau du
vérificateur provincial
de l'Ontario

Box 105, 15th Floor, 20 Dundas Street West, Toronto, Ontario M5G 2C2
B.P. 105, 15e étage, 20, rue Dundas ouest, Toronto (Ontario) M5G 2C2
(416) 327-2381 Fax: (416) 327-9862

***Auditor's Report***

To the Environmental Commissioner

I have audited the statement of expenditure of the Office of the Environmental Commissioner for the year ended March 31, 2001. This financial statement is the responsibility of that Office. My responsibility is to express an opinion on this financial statement based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statement is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, this financial statement presents fairly, in all material respects, the expenditures of the Office of the Environmental Commissioner for the year ended March 31, 2001, in accordance with the accounting policies described in note 2 to the financial statement.

Toronto, Ontario
July 13, 2001

J.R. McCarter, CA
Assistant Provincial Auditor

**OFFICE OF THE ENVIRONMENTAL COMMISSIONER**

**Statement of Expenditure**
**for the Year Ended March 31, 2001**

| | 2001<br>$ | 2000<br>$ |
|---|---|---|
| Salaries and wages | 999,258 | 1,098,605 |
| Employee benefits (Note 4) | 180,389 | 251,864 |
| Transportation and communication | 64,174 | 58,637 |
| Services | 470,683 | 305,672 |
| Supplies | 104,065 | 139,497 |
| | 1,819,569 | 1,854,275 |

See accompanying notes to financial statement.

Approved:

Environmental Commissioner

## OFFICE OF THE ENVIRONMENTAL COMMISSIONER

**Notes to Financial Statement**
**March 31, 2001**

### 1. BACKGROUND

The Office of the Environmental Commissioner commenced operation May 30, 1994. The Environmental Commissioner is an independent officer of the Legislative Assembly of Ontario, and promotes the values, goals and purposes of the *Environmental Bill of Rights, 1993 (EBR)* to improve the quality of Ontario's natural environment. The Environmental Commissioner also monitors and reports on the application of the *EBR*, participation in the *EBR*, and reviews government accountability for environmental decision making.

### 2. SIGNIFICANT ACCOUNTING POLICIES

**(a) Basis of Accounting**

The Office uses a modified cash basis of accounting which allows an additional 30 days pay for expenditures incurred during the year just ended.

**(b) Capital Assets**

Capital assets are charged to expenditure in the year of acquisition.

### 3. EXPENDITURES

Expenditures are paid out of monies appropriated by the Legislative Assembly of Ontario.

Certain administrative services are provided by the Office of the Assembly without charge.

### 4. PENSION PLAN

The Office of the Environmental Commissioner provides pension benefits for its permanent employees (and to non-permanent employeees who elect to participate) through participation in the Ontario Public Service Pension Plan (PSPF) which is a multi-employer plan established by the Province of Ontario. The Office's contribution to the Plan during the year was $53,946 (2000 – $68,993) which is included in employee benefits.

The cost of post-retirement non-pension benefits were paid by MBS and are not included in the statement of expenditure.

### 5. LEASE

The Office has a lease agreement with its landlord for its current premises. The lease payments for the next two years are as follows:

| | $ |
|---|---|
| 2002 | 113,421 |
| 2003 | 103,969 |
| | 217,390 |

# Part 10

## Summary of Recommendations

**Recommendation 1 – The ECO recommends that:**
ministries use information notices only when they are not required to post regular proposal notices **(p. 40)**.

**Recommendation 2 – The ECO recommends that:**
MOE carry out a broad and transparent review of its overall approach to hazardous waste management, including an examination of why imports of U.S. hazardous wastes are rising. **(p. 48)**

**Recommendation 3 – The ECO recommends that:**
MOE and OMAFRA ensure that the new legislation and policies for sewage sludge and septage address the need for overall ecosystem protection, as well as protection of groundwater recharge areas. **(p. 56)**

**Recommendation 4 – The ECO recommends that:**

- MTO adopt a leadership role on long-range integrated transportation planning throughout the province, and especially for the GTA region.
- MTO open its long-term needs assessment process to greater public consultation. **(p. 64)**

**Recommendation 5 – The ECO recommends that:**
MOE provide timely updates on its smog reduction efforts, taking into account emission increases due to economic growth, and using clear, consistent methods to quantify emission reductions. **(p. 72)**

**Recommendation 6 – The ECO recommends that:**
MOE make its compliance policies and procedures consistent and clear to the public, to MOE staff, and to the private and municipal sectors. **(p. 84)**

**Recommendation 7 – The ECO recommends that:**
MOE and MMAH review the need for enabling legislation, such as amendments to the *Municipal Act*, in order to allow municipalities to implement properly the environmental compliance responsibilities delegated to them by MOE. **(p. 84)**

**Recommendation 8 – The ECO recommends that:**

- MOE immediately launch an education campaign and work with key stakeholders and industry associations to promote awareness of the 3R regulations.
- MOE begin documenting complaints regarding non-compliance.
- MOE enforce the source-separation requirements for designated operations in the IC&I sectors. **(p. 97)**

**Recommendation 9 – The ECO recommends that:**
MMAH and other ministries consider, as part of the five-year review of the Provincial Policy Statement, the need for clearer provincial requirements for municipalities regarding the protection of environmentally significant lands. **(p. 120)**

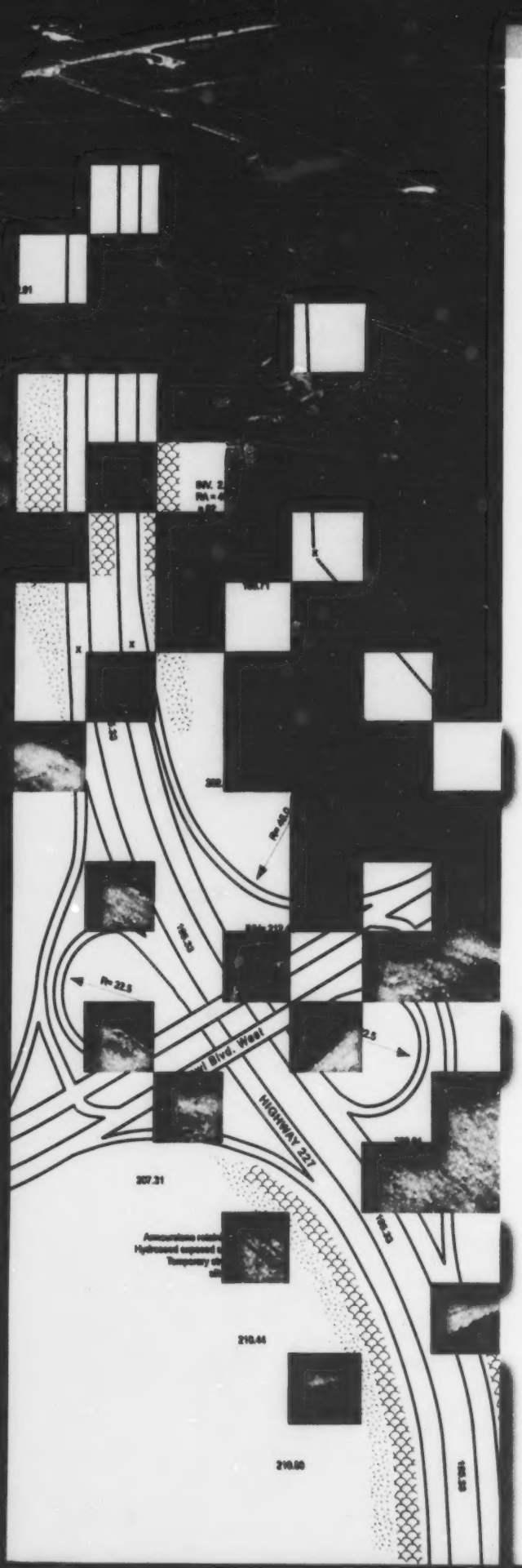
**Recommendation 10 – The ECO recommends that:**
MNDM reintroduce an annual reporting requirement in relation to mine rehabilitation. **(p. 125)**

**Recommendation 11 – The ECO recommends that:**
ministries post status updates on old undecided proposals on the Environmental Registry. **(p. 129)**

**Recommendation 12 – The ECO recommends that:**
MMAH, in consultation with other ministries and the public, develop a comprehensive long-term protection strategy for the Oak Ridges Moraine. **(p. 135)**

**Recommendation 13 – The ECO recommends that:**
MOE re-examine the need to prescribe the Ministry of Education under the *EBR*. **(p. 166)**

**Recommendation 14 – The ECO recommends that:**
MNR create a cohesive framework for land acquisitions programs in order to clarify how these programs will protect the ecosystem and natural heritage features of the landscape. **(p. 176)**




# Appendix A

## Ministry Comments

### Statements of Environmental Values and Business Plans

#### MOHLTC Comment

MOHLTC has put a process in place whereby policy proposals subject to the *EBR* are reviewed at the Ministry Policy Committee. The ministry will make every effort to address your concern and incorporate our SEV into our Business Plan.

#### OMAFRA Comment

While OMAFRA's 2001/2002 Business Plan does not contain a detailed commitment to the ministry's Statement of Environmental Values, this should not be construed as a lack of commitment on the part of the ministry. On the contrary, the ministry remains committed to applying environmental sustainability principles when making decisions based on its 2001/2002 business plan, a commitment that is reinforced by the ministry's vision and actions.

The vision of OMAFRA is: *Ontario – an innovative world leader in responsible, sustainable and environmentally sound agriculture, food and rural development.*

In support of this vision, the ministry continues to apply the decision-making process outlined in the ministry's SEV as an integral part of the implementation of this business plan, when it might significantly affect the environment. The *EBR* posting of Bill 81, the proposed *Nutrient Management Act*, 2001 is a direct result of the application of this process. The proposed legislation has been posted on the Environmental Registry on June 15, 2001 for 60 days. This posting will be updated as the bill moves through the legislative approval process.

### MOE Comment

Each prescribed ministry has a Statement of Environmental Values and supporting processes in place. SEVs are available to the public on the Environmental Registry.

The Managing the Environment Report released in February 2001 recommended a government-wide approach to environmental management. The government is committed to moving forward on implementing the vision expressed in the report.

### MTCR Comment

The Ministry of Tourism, Culture and Recreation is embarking on a planning process for 2001/2002, to integrate our core businesses across the Ministry. This process will entail the development of a new Statement of Environmental Values, and will ensure that we consider environmental values, and apply and integrate the purposes of the *EBR*, through our ministry programs. Environmental protection should, and will continue to be an integrated part of our Ministry's development process. The former Ministry of Citizenship, Culture and Recreation is prescribed on the Environmental Registry under O.Reg. 73/94, and will need to be amended to reflect the new Ministries resulting from the February Cabinet shuffle.

## Instruments

### MOE Comment

**Exclusion of Instruments from SEV Consideration**

The Managing the Environment Report released in February 2001 recommended a government-wide approach to environmental management. MOE will revise its SEV to ensure that it is consistent with such an approach.

**Review of 2 Instrument Decisions and the Affect of Delays on Leave to Appeal Rights**

The window for seeking leave to appeal (15 days from the day the decision was posted) is not affected by delays in posting the decision to the Registry. The ministry posts decision notices for prescribed instruments as soon as possible after the decision has been made in order to have the first party and third party appeal windows overlap as much as possible. While there was a delay in the posting of the decision for Horseshoe Carbons, leave to appeal was requested in an application submitted to the Commissioner on November 6, 2000. The Environmental Review Tribunal did not accept this application because it was received more than 15 days after the decision notice was posted.

### MNR Comment

**Instrument Classification Regulation**

The Ontario Government approved the regulation classifying MNR instruments on June 27, 2001. This regulation will give the public more ways to help make environmentally significant decisions, over and above the many opportunities available through MNR's current postings for Policies, Acts and Regulations and MNR's requirements under the *Environmental Assessment Act*.

## Quality and Availability of Information

### MOE Comment

**Comment Periods for Complex Proposals**

MOE continues to provide extended comment periods for most complex proposals where possible (30 out of 52 proposals posted for 45 days or more). In the case cited by the Commissioner, the amendments proposed were predominantly administrative in nature (which was noted in the posting itself.) As the amendments proposed dealt mainly with the amalgamation of the Environmental Assessment Board and the Environmental Appeal Board to form the Environmental Review Tribunal, a 30 day comment period was appropriate.

**Shortened Comment Periods due to Passing of an Act by the Legislature**

MOE will endeavour to post Acts and amendments to Acts on the Registry for the full comment period. However, in specific cases where it is not possible to do so as a result of the legislative timetable, the ministry will provide information to the public regarding changes to the comment period.

**Quality and Content of Registry Notices**

The text change to the Registry Notice template regarding the availability of supporting documentation has been implemented. This section of proposal postings for policies, Acts and regulations and instruments now reads: "Some Government offices have additional information on this proposal for viewing. These are listed below:"

**Charging for Photocopies**

MOE makes every effort to provide information relating to Registry postings free of charge to the public. However, in cases where the information requested is substantial, the ministry does charge a fee equivalent to that under the *Freedom of Information and Protection of Privacy Act* to help offset resource costs.

## Unposted Decisions

### MOE Comment

**Decision to Exclude Historical Data from Air Quality Ontario Web Site Not Posted**

Over the past year MOE launched the new Air Quality Ontario web site. This year information is being posted daily. Improvements are being made continuously. How best to provide historical data is being considered.

**Decision to Shut Down Acid Rain Monitoring Network Not Posted**

The monitoring network duplicated Environment Canada's acid rain monitoring in the province. Monitoring is continuing through partnership with Environment Canada. The change allowed MOE resources to be redirected to biological and chemical assessment studies in acid-sensitive watersheds.

**Moratorium on Sale of Coal-Fired Generating Stations Not Posted**

Imposing the moratorium ensured the status quo while options were being evaluated for ensuring effective environmental protection measures are put in place. Although the moratorium was not posted, related proposals – strengthening emissions limits and ceasing coal burning at the Lakeview Generating Station – have been posted for public comment.

### MNR Comment

**Ontario Water Response (OWR) 2000**

The draft OWR 2000 was developed with direct participation from two major stakeholder groups (Conservation Authorities & Municipalities) and then posted for public comment for 60 days. MNR was very committed to a process that ensured opportunities for input. Comments received were all supportive.

## Information Notices

### MMAH Comment

**Objective-Based Building Code**

Policy Exception notice number PF00E1001 (also known as an Information notice) provided 30 days for public comment on the Objective-Based Building Codes Consultation, which is equivalent to the public participation opportunities that a "regular notice" (Policy Proposal notice), would offer. It should be noted that no comments were received by MMAH on PF00E1001. Once the consultation concludes and policy is developed, a Policy Proposal notice may be appropriate if the policy is environmentally significant. The "rationale" section of PF00E1001 correctly stated that MMAH was not required to post notice of the consultation and the "decision" section reinforced that the consultation was not environmentally significant. This *EBR* posting was in addition to a dedicated Website created by MMAH to solicit public input electronically and the link to this site was included in the PF00E1001. This first stage consultation is part of a lengthy federal/provincial process that will afford numerous opportunities for the public to comment on the objectives, format and specific technical requirements of the next edition of the *Ontario Building Code*.

MNR Comment

**Areas of Natural and Scientific Interest (ANSI)**

MNR's ANSI confirmation procedure information posting was administrative and does not alter the ANSI policy and program. MNR continues to use a variety of approaches to protect ANSI. For example, many ANSI are being protected permanently in new parks and conservation reserves identified through Ontario's Living Legacy.

## Exception Notices

MOE Comment

**Delay in Posting Emergency Exception – Orders for Remedial Work and Preventative Measures Under the *Environmental Protection Act***

MOE usually posts exception notices when prescribed instruments are issued under emergency situations. The case cited is an exception. The ministry will continue to make every effort to ensure that exception notices are posted to the Environmental Registry as soon as possible.

## Hazardous Waste

MOE Comment

**In Response to "How Much Hazardous Waste is There?"**

Regulation 347 requires waste generators to register the type and quantity of their liquid and hazardous waste with the ministry. This is a one-time registration requirement. Under the ministry's new proposal, which was posted on the *EBR* Registry in July 2001, waste generators would be required to re-register on an annual basis and provide information on quantities and classification of hazardous waste generated, shipped off site and wastes which are managed on site.

The Waste Manifest Database tracks the movement of hazardous waste, off-site and provides the necessary information to ensure that it is transported by approved carriers and sent to approved treatment and disposal facilities. The Ministry has recognized that this is not the case for on-site activities and is proposing changes to improve the quality of information in the database.

**With Regard to the Increase in U.S. Waste**

In addition to the reasons cited, the report does not mention proximity to facilities, the Canadian dollar and the consolidation of North American waste management companies as other reasons contributing to imports. The consolidation of North American waste management companies has resulted in wastes going to specialized treatment and disposal facilities in the most cost-effective manner, regardless of which side of the border they are located. Approximately 64,000 tonnes of the imports from the U.S. went to Ontario facilities for recycling (e.g. oil recycling) and about 147,000 tonnes went to disposal. Ontario companies exported 207,000 tonnes of hazardous waste in 1998, up from 137,000 tonnes in 1994.

**In Response to ECO's Discussion of MOE's Role**

The government concluded the Ontario Waste Management Corporation's mandate after the environmental hearing board ruled on its application. However, the government did not discontinue planning for hazardous waste treatment and disposal as it still maintains its role of setting standards and requirements and approving these facilities.

**In Response to "Is Further Review of MOE's Hazardous Waste Management Policies Required?"**

The Ministry, in its November 2000 announcement indicated that this initiative [passage of O. Reg. 558/00] concludes the six point action plan. Land disposal restrictions were not part of the changes announced in November, 2000. The Ministry continually reviews its hazardous waste regulation and requirements and land disposal restrictions are part of this review.

## Management of Sewage Sludge and Septage

### OMAFRA Comment

MOE and OMAFRA co-authored the Guidelines for the Utilization of Biosolids and Other Wastes on Agricultural Land, March 1996 which outlined the beneficial reuse of biosolids in Ontario. MOE is responsible for regulating septage haulers, the disposal of septage on agricultural land and the management of biosolids. Bill 81, the proposed *Nutrient Management Act, 2001* will also identify new standards for all land-applied materials containing nutrients, including biosolids and septage.

## MOE Comment

**General**

On June 13, 2001, the Ontario government introduced the proposed *Nutrient Management Act*. This legislation would ensure, through strong new protective measures, that all land applied nutrients are properly managed, so that Ontario's environment and water quality in particular, is protected. An important component of Operation Clean Water, the legislation would allow for development and implementation of an integrated approach to managing land applied nutrients.

**Lack of Clear Enforceable Rules Related to the Application of Nutrients to Land**

The proposed *Nutrient Management Act* would establish through regulation clear enforceable rules related to the application of nutrient rich materials on land. The application of untreated septage to land would be banned within five years of the Act being passed.

**Certificates of Approval for the Application of Nutrients to Land Should be Posted on the Registry**

The current consultation requirements related to the application of land applied materials would be reviewed as the regulations under the proposed *Nutrient Management Act* are developed. A requirement under the proposed *Nutrient Management Act* is that all applications be posted on a publicly accessible registry. This registry would include the type of material produced, volume, how it is being managed and where it is being applied.

**Enforcement of C of A Requirements Related to the Application of Sewage Biosolids**

MOE would be responsible for the enforcement of the proposed *Nutrient Management Act*. Highly trained provincial officers with a knowledge of agriculture would ensure focused and effective environmental enforcement of the proposed Act. The MOE SWAT team has already targeted the compliance with Certificate of Approval requirements related to biosolids, septage and pulp and paper sludge.

**Environmental Damage from Application of Sludge to Wet Land or Land close to Water**

Regulations under the proposed *Nutrient Management Act* would ensure that minimum separation distances apply to all land applied nutrient rich material including manure. Specific rules related to timing of application are being considered, for example, materials would not be applied to frozen or saturated ground.

**Septage Handling and Environmental Impacts**

Under the proposed *Nutrient Management Act*, septage haulers and applicators would need to be trained and certified.

**Streamlining of MOE Approvals**

The rules related to the application of biosolids would be included in the regulations developed under the proposed *Nutrient Management Act*.

**Inadequacies in Existing Rules for the Application of Nutrients to Land**

Regulations under the proposed *Nutrient Management Act* would establish updated, environmentally protective rules which would apply to all land applied nutrients including, manure, septage, sewage biosolids and pulp and paper sludge. Note: five years after the proposed Act is passed the application of untreated septage would be banned. Until that time, the environmentally protective standards will also be applied.

**Problems with Existing Rules**

The proposed *Nutrient Management Act* includes for the development of strong new standards for all land-applied materials containing nutrients and strong new requirements such as: the review and approval of nutrient management plans, certification of land applicators and new registry system for all land applications.

## Transportation and Land Use Planning for the GTA

### MTO Comment

We acknowledge the Environmental Commissioner's concerns that the public be provided with appropriate information. To this end, the ministry has committed to communicate its needs assessment studies to the public through postings on the Environmental Registry.

We are pleased to receive the Environmental Commissioner's comments on the role of the Ministry of Transportation in transportation planning for the GTA. These comments will serve as important input as the Province continues to develop its approach to comprehensive planning in the Golden Horseshoe region, and throughout the province.

MTO's commitment to long-range infrastructure planning begins with its transportation needs assessment process. These studies examine transportation demands, economic growth, population forecasts, land use plans and trends, and environmental constraints. Consideration is given to a range of transportation alternatives, including commuter and intercity bus and rail, rail freight lines, major airports, marine modes, and technological developments in transportation demand management to effectively address growing needs within a study area. The ministry uses these studies to identify broad corridors that satisfy the transportation, land use, and economic objectives, and to follow a path of low impact with respect to environmental and other constraints. The transportation options that are developed through this process consider the environmental and land use objectives of the Provincial Policy Statement and Environmental Assessment process.

The ministry recognizes that strategic transit investment is key to addressing congestion gridlock in urban areas across the province, including the GTA and surrounding Golden Horseshoe region. The 2001 Provincial Budget announced:

"The Government will invest $250 million from the Millenium Partnerships Initiative in strategic infrastructure projects in eight major urban areas: Ottawa, Waterloo Region, London, Windsor, Niagara Region, Hamilton, Sudbury and Thunder Bay.

Millenium Partnerships will invest in four project categories:

- address gridlock, including transit expansion projects
- environmental protection including water and sewer upgrades and environmental remediation projects
- access to strategic highway corridors and border crossings
- urban revitalization projects, including public realm components of downtown and waterfront renewal projects

"...To help alleviate gridlock, The Province created the Golden Horseshoe Transit Investment Partnerships (GTIP) Fund by allocating $250 million from the five-year $1.0 billion Superbuild Partnerships initiative.

The GTIP will support the expansion of inter-regional transit infrastructure such as commuter rail, light rail and dedicated transitways. New rolling stock, signal, station infrastructure and advanced fare collection and passenger information systems will be eligible provided they create region-wide network service benefits. Matching commitments from the federal government and municipalities, along with an expanded role for the private sector, could significantly add to the GTIP investments in new and expanded transit services throughout the Golden Horseshoe region.

A co-ordinated approach to transit planning, service delivery, fares and financing is needed to ensure both a seamless transit system in the GTA and beyond, and that transit becomes increasingly attractive and efficient. While there has been considerable effort over the last two years to improve co-operation among GTA municipalities, it is clear that provincial leadership is necessary."

To foster a more balanced and integrated transportation system across Ontario, the Province is clearly committed to undertake the strategic investments required to support inter-regional transit development.

### MMAH Comment

In response to the ECO's inquiry in February 2001, MMAH and the Ministry of Transportation (MTO) clarified for the ECO that the government did not transfer responsibility for overall GTA transportation planning to the GTSB. The GTSB did assume responsibility for GO Transit in 1998 – this is the only area of transit planning for which the Board has responsibility at the present time. GO Transit was formerly the responsibility of MTO. MMAH would like to refer the ECO to MTO's letter to the ECO of April 24, 2001, which explained that municipalities have always had the responsibility for the planning of transportation initiatives within their mandate – local roads, transit, bike pathways, etc. The creation of the GTSB did not change any of the powers of the existing municipalities to plan and provide services, including transportation services, for their inhabitants. Neither did it change the responsibility of the Province for planning portions of provincial highways within the GTA.

## Air Issues

### MOE Comment

**Control of Industrial Emissions**

MOE is fundamentally changing the way Certificates of Approval are issued and amended with the overriding goal of ensuring certificates are up-to-date and compliance achieved. The ministry has completed a review of options for updating certificates. Media specific protocols for updating Certificates of Approval will be in place by April 2002.

The Certificate of Approval for the Safety-Kleen incinerator was not amended because the ministry review found that the existing conditions adequately regulate air emissions by requiring that all applicable regulatory and policy standards be met. The review of the SWARU Certificate of Approval is still underway and the decision on the amendment will not be made until the review is concluded.

**Control of Electricity Sector Emissions**

Ontario Power Generation has retired emission credits to meet its voluntary commitment of 38 kilotonnes of $NO_x$ from the year 2000 and onwards.

**MOE's Annual Air Quality Reports**

Ontario's air quality reports are published and publicized on the ministry's web site making them easily accessible to the public. Processing the millions of air quality data needed to compile the reports takes considerable time and effort. MOE staff perform audits, assure the quality of the data and interpret the results in compiling the reports.

**Ontario Air Quality Web Site**

The web site is extremely popular having received over 4 million visits since its launch in April 2000. Over the past year MOE launched the new Air Quality Ontario web site. This year information is being posted daily. Improvements are being made continuously. How best to provide historical data is being considered.

## Compliance and Enforcement at MOE

### MOE Comment

**General**

The government is moving forward to implement the vision expressed in the Managing the Environment Report. The report's vision recognizes that effective environmental management must include strong enforcement of environmental rules, along with a range of tools such as co-operative agreements, economic instruments, etc.

**Consultation on Procedures for Responding to Pollution Incident Reports (PRPIR)**

The Information and Privacy Commissioner has confirmed and upheld that the PRPIR is an internal operational document. The rationale was that publicizing MOE's priorities would give potential offenders information they could use to successfully violate environmental laws. The PRPIR is used by the ministry to guide field response to ensure priority is given to incidents that pose the greatest risk to health and the environment.

**ECO Request for Investigation Denied because PRPIR Followed**

An Ombudsman's investigation found that MOE's actions relating to the denial of a request for investigation under the *EBR*, which were in accordance with the PRPIR, were appropriate.

**MOE's Approach to Compliance**

MOE is committed to enforcing Ontario's environmental laws. The Compliance Guideline was not changed. Beginning in March 2000, based on the guideline, the ministry implemented a tougher and stronger enforcement approach to achieve a higher level of compliance. The guideline is being revised to provide clearer direction on using tougher, stronger enforcement measures.

**MOE's "SWAT" Initiative**

SWAT's activities have been communicated to key sector groups through presentations and outreach material, and more broadly through the team's official launch on June 25, 2001. The ministry will continue to make the SWAT team's findings public and to educate targeted sectors. The web site will be up and running shortly.

The environmental SWAT team complements district inspection activities with strategic inspection programs that target specific pollution sources. SWAT uses the same procedures and instruments as district office staff do to achieve compliance. SWAT works very closely with the Investigations and Enforcement Branch (IEB), the SWAT team investigators report to IEB and follow IEB procedures.

**The Pollution Hotline**

The pollution hotline provides an easy way for people to act on their responsibility to help protect the environment by bringing potential problems to the ministry's attention. There are procedures in place to guide the ministry's response to ensure priority is given incidents that pose the greatest risk to health and the environment.

**Compliance Problems**

MOE is committed to enforcing Ontario's environmental laws. Beginning in March 2000, the ministry implemented tougher and stronger enforcement to achieve a higher level of compliance. There was a 312 per cent increase in the number of orders issued in 2000 from 1999. During the same time, there was a 372 per cent increase in the number of tickets issued. The number of charges laid increased by 48 per cent in 2000 from 1999. Fines issued in 2000 were $3 million while the total amount of fines in 1999 was $1.5 million. This trend is expected to continue.

**Contraventions Revealed by Inspections of Municipal Water Treatment Plants**

All water treatment plants were routinely inspected prior to the inspections carried out in 2000. The number of orders issued to owners of municipal water treatment plants during 2000 demonstrates the ministry's commitment to tougher and stronger enforcement.

**MOE's Compliance Guideline**

The Compliance Guideline is being revised to provide clearer direction on using tougher, stronger enforcement measures.

**General**

This Section does not recognize the Smog Patrol contribution to MOE's compliance and enforcement activities. This on-road enforcement component of Drive Clean spot-checks trucks, buses and light duty vehicles that are gross visible emitters of smog-causing pollutants. Since the summer of 1998, the Smog Patrol has inspected more than 9,000 vehicles – including buses and trucks – and issued more than 1,400 tickets for violations of the *Environmental Protection Act*.

## Update: Provincial Groundwater Strategy

### MOE Comment

**Operation Clean Water**

On June 13, The *Nutrient Management Act 2001*, was introduced as the next step in the government's Operation Clean Water strategy. The proposed legislation would protect the environment with consistent province-wide standards for the management of nutrient material.

**Provincial Groundwater Monitoring Network**

The conservation authorities responsible for managing groundwater in the 10 watersheds were provided with draft reports in 1999 and 2000. Final reports on the 10 watersheds will be made publicly available on the ministry's web site in summer 2001.

**Financing of Groundwater Studies**

There are now 4 completed Provincial Water Protection Fund (PWPF) groundwater studies, and approximately 80% of the studies have a draft report. All 34 municipal groundwater studies funded under the PWPF are scheduled to be completed by fall 2001.

**MOE's Permit to Take Water/Guidelines and Procedure Manual**

Work is underway to develop new models for water budgeting and to provide the foundation for a more rigorous assessment of cumulative effects. Information is now available on a sub-watershed basis to assist reviewers in addressing cumulative impacts when reviewing PTTW applications.

**Continuing Gaps in a Provincial Groundwater Strategy**

In its May 2, 2001 Throne Speech, the government committed to taking "decisive steps to protect the province's water supply, including implementation of a comprehensive, multi-disciplinary strategy to protect Ontario's groundwater."

### MNR Comment

**Provincial Water Resources Information Project**

MNR is working with 5 other ministries and partners based on a shared goal of providing a more holistic and comprehensive approach to groundwater through the Water Resources Information Project (WRIP). This joint initiative has produced several usable products including permit to take water, Quaternary geology, drainage (lakes, rivers), water use and topographic data that will improve decision-making capacity around this precious resource.

## 3R Regulations Compliance

### MOE Comment

**General**

On June 26, 2001, the Ontario government introduced the proposed *Waste Diversion Act*, 2001. The legislation would establish a permanent long term organization called Waste Diversion Ontario to develop, implement and fund waste diversion programs. The *Waste Diversion Act* will provide municipalities and waste diversion agents with the tools to enhance waste diversion in the province. This will lead to a reduction in recyclable materials going to landfills. The first task of the new Waste Diversion Ontario will be to develop a funding formula to provide municipalities with funding to cover up to 50 percent net costs of the municipal Blue Box program. This will provide the municipalities with the financial support to enhance the Blue Box program, thus diverting more recyclables from landfills.

**Suggestion that Communication and Education Efforts Directed at the IC&I Sector have Stopped**

Ministry figures based on weight indicate that the IC&I sectors as a whole surpassed the 50 percent goal of diversion in 1999. As a result, it seems apparent that the regulated establishments in these sectors are adequately informed of the regulations, and are acting appropriately.

**Ontario Lagging Behind Most Other Provinces**

Although the Statistics Canada's 1998 survey results indicate that other jurisdiction's IC&I sectors diverted more of their wastes from disposal than Ontario, there is no sector-by-sector equivalency across the jurisdictions.

**Lack of Enforcement Resources**

Ministry inspection and investigation resources are focused on incidents that pose the greatest risk to health and the environment.

**Exploration of Compliance Assistance Programs for Small New Companies**

The Managing the Environment Report recommends the design, development and implementation of an integrated approach to environmental compliance. This integrated approach would be performance based, encourage innovation, recognize leaders, provide incentives and technical assistance to improve performance, and would focus oversight and enforcement on those not meeting performance requirements. As the Ministry implements the Managing the Environment vision, it will explore opportunities to provide compliance assistance to small companies.

## Canada Wide Standard for ozone and particulate matter

### MOE Comment

The CWS agreement for Ozone included a special clause for Ontario that recognized transboundary flows of smog causing air pollutants: "For the province of Ontario, a 45% reduction in NOx and VOC emissions from 1990 levels by 2010 or earlier, subject to successful negotiations this fall with the U.S. for equivalent reductions, will be considered the province's appropriate level of effort towards achieving the ozone CWS. Any remaining ambient ozone levels above the CWS in Ontario will be considered attributable to the transboundary flow from the U.S. ozone and its precursor pollutants."

In December 2000, Canada and the U.S. signed the new Ozone Annex to the 1991 *U.S. – Canada Air Quality Agreement*. In the agreement it was stated that the U.S. estimates that the total NOx reductions in the U.S. transboundary region will be 36% year-round by 2010; essentially the same reductions previously announced by the U.S. EPA. Ontario's commitments are to reduce NOx emissions by 25% by 2005 (public business plan, 2000/01) and 45% by 2015 (Anti-Smog Action Plan commitment). Taken together, the Ozone Annex and the CWS do not oblige the MOE to speed up its provincial NOx and VOCs reduction commitments, although Ontario may choose to make new commitments in the future.

Ontario will develop an implementation plan for CWS for PM2.5 and ozone, which will build on the effort of Anti-Smog Action Plan (ASAP). While the ASAP partnership is voluntary, Ontario's reduction efforts include also regulatory measures. Ontario plans to publish reports on progress.

## *Toughest Environmental Penalties Act*

MOE Comment

Administrative Monetary Penalties will not and should not be available for directors and officers when they fail to take all reasonable steps to prevent an illegal discharge from occurring. This is a serious offence which will be pursued through prosecution. Bill 124 did not repeal fines and jail terms for company directors and officers.

## Regulatory Improvements for Hazardous Waste Management

MOE Comment

**Removal of Requirement to Register Wastes with Leachate between 10-100% of the Criteria**

The proposal to remove the requirement to register this waste (i.e. registerable solid waste) was part of the Ministry's Draft Waste Management Regulation posted on the *EBR* Registry for public comment in 1998. The decision notice for Regulation 558/00 indicated that no comments were received from any stakeholder group during the consultation of this proposal in 1998.

**Ministry Response to Significant Concerns**

The majority of the concerns that were expressed by the stakeholders were beyond the scope of the proposal. The proposal was to ensure that Ontario's criteria for what is a hazardous waste was more compatible with that of other jurisdictions. Many of the concerns raised dealt with the *Environmental Protection Act's* definition of waste and the regulatory requirements for recyclable materials and the introduction of land disposal restrictions.

**Concerns about Increasing Disposal at Safety-Kleen's Landfill**

Not all of the wastes that are now hazardous will be sent to landfill. As is the case now, a large portion of this waste stream is sent to facilities to treat, process and/or recycle this waste.

**Conflict between the Contaminated Sites Guideline and the Leachate Test**

A difference in a contaminant in Table B of the Guideline for Use of Contaminated Sites and Schedule 4 of Regulation 347 was identified. However, the application of these two tables is fundamentally different. Table B is used when a site is being restored and defines generic criteria for when the surface soil is acceptable for the particular land use in a non-potable groundwater situation. Schedule 4 is used to determine, using the Toxicity Characteristic Leaching Procedure (TCLP), if a waste is leachate toxic and therefore needs to be handled according to the requirements for managing hazardous waste under the *Environmental Protection Act (EPA)* and Regulation 347 such as to prevent groundwater contamination for drinking water from leachate out of a municipal landfill.

**Universal Treatment Standards and Land Disposal Restrictions**

The Ministry has been discussing this issue with Environment Canada. In a letter from the Honourable Dan Newman to the Honourable David Anderson sent in August 2000, the Minister stated that "the process of harmonizing our standards with other jurisdictions is well underway in Ontario; and is a major step forward in addressing the issue of hazardous wastes being imported into Ontario. I am committed to further reviewing and updating our regulations, including the need for pre-treatment prior to landfilling...".

**Ministry's Claims that Ontario's Regulation is Now Consistent with U.S. Rules**

The Ministry's *EBR* Decision Notice said that in adopting the TCLP and replacing Schedule 4 with an expanded list of leachate quality criteria, MOE "would become *more consistent* with current U.S. regulations...".

## Emissions Reporting Regulation for Electricity Generators

MOE Comment

Reg. 227/00 resulted in reports (as of June 11) from over 120 generators. The Ministry proposed changes to requirements for CEMs which apply to $NO_x$ and $SO_2$. The requirements for the other 26 contaminants for the sector were clear.

## Drinking Water Protection Regulation

MOE Comment

**Development of Acceptable Alternate Water Treatment Technologies**

The MOE strongly supports the research and development of new technology to provide cost-effective treatment of drinking water supplies. The Ministry has recently begun developing a roster of technology and service providers for the installation and operation of water treatment facilities.

**Monitoring Small Waterworks**

The Ministry is reviewing and reporting requirements for small waterworks. A discussion paper was released in August 2000, asking how small waterworks should be regulated. The written submissions are being considered in developing options for small waterworks.

Another step in Operation Clean Water, the proposed Drinking Water Protection Regulation for Designated Facilities, was posted to the Environmental Registry for public comment on July 10, 2001. The proposed regulation would place strict requirements on schools, day nurseries, nursing and retirement homes and social and health care facilities that have their own water supplies and do not fall under the existing Drinking Water Protection Regulation. The proposed regulation follows feedback the ministry received during consultation on the MOE discussion paper released in August 2000.

## Presqu'ile Park Management Plan

### MNR Comment

The park management planning process for Presqu'ile Provincial Park required the resolution of complex and often controversial issues. Opportunities for public consultation were provided. The resulting plan strikes a balance between heritage protection and recreational use. With respect to waterfowl hunting, it is expected that no net social or economic impact will result from removal of the hunt as alternative opportunities would be identified and phased in simultaneously.

## New Fishing Regulations for the Northwest Region

### MNR Comment

MNR appreciates the commendations by the ECO regarding our public consultation efforts and our use of the Environmental Registry for these regulation changes. MNR remains committed to ensuring the long-term sustainability of Ontario's fish populations while providing high quality angling opportunities and streamlining and simplifying the regulations where possible.

## Marshfield Woods

### MMAH Comments

Note that MNR identifies a Provincially Significant Wetland (PSW) and the municipality, in having regard to the Provincial Policy Statement (PPS), may designate the PSW in their official plan.

There is also an OPA initiated by a private individual to redesignate the lands in question for long term protection. This OPA is separate from the OPA that was adopted by the municipality (objected to by local residents and others) and refused by MMAH – the application for a golf course development. The municipality did not adopt this privately-initiated OPA and this individual has appealed the municipality's decision to the OMB.

The Ministry's understanding of the conditions of the Marshfield woodlot and wetlands do not support the conclusions drawn by the ECO. The lands have been identified as a PSW. Tree cutting occurred in the Marshfield Woods PSW and any golf course development in this area would require further tree cutting.

The ECO has raised a concern that Marshfield Woods will not necessarily be protected since the land is currently designated agricultural. MMAH would like to clarify that this is an interim situation and does not adequately reflect all possible outcomes. For example, as a result of the OMB decision, the PSW lands could be placed under a strict environmental protection designation.

## *TSS Act*

### MCBS/TSSA Comment

The Ministry is working on a regulation to prescribe the relevant portions of the *TSS Act*, including the new Liquid Fuels Handling Regulation, under the *EBR*. This will ensure that the *EBR* requirements that applied to the now revoked *Gasoline Handling Act (GHA)* and its regulations are maintained and that the ECO's role related to gasoline handling and gasoline safety will still be carried out under the new regulatory regime.

The concern of the ECO regarding the lack of SEV consideration is understood. The Ministry could have better explained that as Bill 42 did not contain any technical details related to the safe handling of gasoline, there was not a direct link to the SEV. However, in the development of the new Act and the transfer of technical details to regulations, Cabinet instructed the Ministry that there was to be no reduction in public safety. As a result, the intent of the SEV was implicit in the development of the Act and regulations. In future, the Ministry will undertake to better explain the incorporation of the SEV into posted decisions.

With regard to postings made on the Registry, the Ministry and TSSA will work to ensure that more details are provided so that readers may better understand the reasons for the posting and any environmental implications that may result. This will be done using simple and plain language and without the use of technical jargon.

## The *Mining Act* Part VII Regulation and the Mine Rehabilitation Code

### MDNM Comment

MNDM supports the "polluter pays" principle and maintains that mining operators are required to reclaim their own mining properties. The ministry is taking part in a national industry-government working group that is examining possible ways of addressing abandoned mine hazards.

Mine operators are required to report significant changes to mine closure plans to the ministry on an ongoing basis. MNDM feels that this provision will alleviate duplication in annual reporting and will allow for important revisions to be reported on a more timely basis.

## Changes to Ontario Regulation 82/95 – Minimum Energy Efficiency Levels

### MEST Comment

The ministry thanks the Environmental Commissioner for recognizing the ministry's efforts to expand and improve minimum energy efficiency standards in Ontario. The ministry will continue to participate actively in the national standards development process and is committed to maintaining its leadership role.

## Need for Action

### MOE Comment

A number of postings for which decision notices remain outstanding have been identified. The ministry has consulted with the ECO on this issue, and is currently working to clear the backlog and to refine processes to minimize delays in posting of decision notices.

### MNR Comment

MNR has posted the following decisions or updates on the Registry.

PB8E6011, Policy issuance of work permits under s. 14 of PLA, Decision Notice posted on June 4, 2001

PB8E3025, Amendment to Bracebridge DLUG: permitted uses on Crown Land in the Kimball Lake area, Update to the Proposal Notice posted on March 28, 2001

PB7E6017, Waterfront Boundaries for Grants of Public Land, Decision Notice posted July 12, 2001

PB8E6004, Agreement on Basic Principles- Site Investigation, Clean-up Mid Canada Line, Decision Notice posted July 12, 2001

RB7E6001, Instrument Regulations under *EBR*, Decision Notice posted July 13, 2001

## Oak Ridges Moraine

### MMAH Comment

The government heard the concerns about development on the Oak Ridges Moraine (ORM). To address these concerns, the *Oak Ridges Moraine Protection Act*, 2001 was introduced by the government and received Royal Assent on May 29, 2001. This Act introduced a six-month moratorium, commencing May 17, 2001 which:

- stops municipalities from adopting official plans, official plan amendments, zoning by-laws or approving plans of subdivision involving land on the ORM;
- stops applications for official plan or zoning by-law amendments or plan of subdivision approvals involving land on the ORM;
- stays development applications before the Ontario Municipal Board (OMB) involving lands on the ORM, and prevents the OMB from issuing orders with respect to such applications; and,
- on July 19, 2001, a regulation under the Act was approved permitting certain developments to proceed. Those subdivisions that have: appropriate zoning in place and draft approval and one of the following: signed subdivision agreement, pre-servicing commitments, or lots sold, may proceed.

The moratorium permits consultation with stakeholders and the public about which parts of the moraine should be protected and how they should be protected. The strategy will set out clear rules, identify roles and responsibilities, and clearly define areas for development, protection or future study.

## Mellon Lake

### MNR Comment

In its review of MNR's response to this request for an *Environmental Bill of Rights* review of the above matter, the ECO Report comments on the forest reserve policy that is established in Ontario's Living Legacy Land Use Strategy. The report asserts that "forest reserves are simply mining claims." This statement and the related discussion do not recognize the many forms of protection that are afforded by MNR to natural heritage values within forest reserves. Policies for forest reserves are generally similar to the policies for new conservation reserves – commercial forest harvesting, new hydroelectric power development, peat extraction and sale of Crown land are prohibited in forest reserves. Furthermore, Section 7.2.3 of the Strategy places limitations and restrictions on the types of aggregate permits that can be permitted in forest reserves.

The goal of the Ontario's Living Legacy process was to balance environmental, recreational and resource-based interests on Crown lands. The decision to permit continued mineral exploration in existing mining tenure within protected areas was part of a comprehensive set of decisions that were intended to balance the need to protect the environment and provide increased certainty to resource industries. A review of the application of the forest reserve policy on a site-specific basis would not have been appropriate, because it would not have been able to consider the province-wide balance that was the basis for the Land Use Strategy.

The new OLL protected areas are "withdrawn from staking," and thus no new mining claims can be staked. Over time, it is expected that many of the existing claims that are designated as forest reserves will lapse, and these lands can then be added to the new protected areas.

### MNDM Comment

MNDM concurs with MNR's response to this report's concern regarding the Mellon Lake Conservation Reserve. The concept of providing interim protection for potential new parks and protected areas by withdrawing lands from claim staking, given the scope of the land use planning exercise, would have been extremely difficult. Although core protected areas were identified and refined, a substantial number of other potential new sites were continually being developed and revised during the planning process. In the future, MNDM will endeavor to respond to all *EBR* "applications for review" in a full and timely manner.

## Safety-Kleen

### MOE Comment

**With Regard to the Landfill**

The gas and water seeps under Sub-cell #3 are related to specific hydrogeological conditions that exist directly under the cell, not under the entire site. Groundwater monitoring conducted at the site to date has not identified any movement of contaminants into the aquifer. The site was closed so that a comprehensive investigation of the anomalies could be undertaken to ensure there would not be any potential environmental harm.

The services of an independent on-site inspector have been retained.

The resubmitted Design and Operations Report, which contains additional financial assurance requirements, was made available for public comment. The Director considers comments from interested parties such as the Community Liaison/Advisory Committee prior to approving the Design and Operations report. The requirement to provide proposed changes to the Community Liaison/Advisory Committee ensures it has an opportunity to comment to the Director.

**With Regard to the Incinerator**

The six point action plan did not apply to final disposal hazardous waste facilities like landfill or incinerator. It applied to intermediate hazardous waste processing facilities. The six point action plan did not indicate that Certificates of Approval would be reviewed and strengthened to match U.S. requirements.

MOE considers U.S. standards when reviewing applications for new or modified incinerators.

Modifying the incinerator to achieve the CWS for mercury and dioxins will result in additional environmental improvements. Changes to plant operations, including installation of pollution control equipment and changes to incinerator operation, will yield benefits for other pollutants.

MOE's dealings with Safety-Kleen are transparent. The application to modify the incinerator was received and posted on the *EBR* registry for public comment in December 2000. The Certificate of Approval application was received after the response dated December 1, 2000 was sent to the applicants.

## Ontario Hydro *Fisheries Act* Violations

### MNR Comment

An extensive, thorough investigation was conducted by MNR. MNR concluded there was not sufficient evidence to lay charges under subsection 36(3) of the *Fisheries Act*. Copper and zinc are essential elements of aquatic life. Lake-wide low levels of copper and zinc measured in fish did not result in human consumption advisories and did not restrict the sale of fish; nor did it cause concern about the health of fish. Based on existing data and scientific knowledge, MNR could not demonstrate a negative local effect on aquatic organisms.

MNR made recommendations to Ontario Power Generation to monitor discharges from generating stations and to replace the Admiralty Brass condenser tubes. MNR asked that DFO evaluate the *Fisheries Act* to address the discharge of metals from generating stations to protect the long-term health of aquatic life.

## Ministry Implementation of 1999/2000 ECO Recommendations

### OMAFRA Comment

**Nutrient Management Legislation**

On June 13, 2001, the Ministers of Agriculture, Food and Rural Affairs and Environment took the next step in Operation Clean Water with the introduction of Bill 81, an Act regulating the management of land-applied materials containing nutrients.

If passed, Bill 81, will provide a framework to protect the environment by providing preventative measures to address the effects of agricultural and municipal operations through the proper management of land-applied materials containing nutrients. In addition, the proposed legislation, with clear standards, will help ensure that farmers can invest in and operate their farms with confidence.

The proposed legislation has been referred to the Justice and Social Policy Standing Committee for all-party review. It is expected that the committee will consult over the summer and report back in the fall. OMAFRA and the MOE plan to consult with stakeholders over the summer on potential standards.

**Genetically Modified Organisms**

Ontario supports a strong federal regulatory system in ensuring consumer and environmental safety are scientifically assessed and confirmed. The ministry is therefore concerned about the apparent weaknesses in the federal regulatory processes for genetically modified foods that have been identified by the Royal Society of Canada's Expert Panel on the Future of Food Biotechnology. Ontario continues to look to the federal government to deal with this complex issue and OMAFRA will also be monitoring the federal response to the environmental concerns raised by the Panel.

## MEST Comment

***Ontario Energy Board Act***

The Ministry thanks the Environmental Commissioner for acknowledging the Ministry's efforts to respond to Recommendation 11 of his 1999 Report. On April 25, 2001, the Ministry posted on the Environmental Registry a notice of a proposal to amend O.Reg. 73/94 so that regulations made under S. 88(1)(b)-(g) of the *Ontario Energy Board Act, 1998*, specifically regarding environmental disclosure, emissions reporting and the application of emission credits, are subject to Registry notice and comment requirements.

**Ecosystem Protection and GMOs**

In Ontario food safety is of the utmost importance. Ontario supports the responsible use of agri-food technology- including genetic modification – when consumer and environmental safety are scientifically assessed and confirmed.

MEST is very sensitive to ecosystem protection and environmental issues and we are following the Genetically Modified Organisms (GMOs) debate very closely. Ontario advocates sound scientific principles to ensure the responsible use of GMO's and environmental protection.

With respect to biotechnology, Ontario does not regulate GMOs and has no jurisdiction over approval as this is a federal responsibility. Therefore, we are concerned about any deficiencies in the federal regulatory processes for genetically modified foods.

However, the Government of Canada is committed to the on-going process of ensuring that its regulation of foods derived from biotechnology is appropriate for the state of the science and the types of food and plant products that are being developed through research. To that end, the federal government has allocated $90 million in its 2000 Budget especially to enhance the regulatory system for products of biotechnology.

We look forward to reviewing the federal government approach to help improve Canada's regulatory system into the 21st century.

## MBS Comment

**Sales of Government Lands**

The ORC acknowledges that, until recently, it has not published its *Annual Summary Report of Undertakings Subject to the MBS Class Environmental Assessment for Realty Activities* (Annual Summary Report.) The Annual Summary Reports for each year from 1998 to the end of fiscal 2000/01 will be provided to MOE and the ECO under a changed protocol.

In March 1999, the Deputy Minister wrote to the Environmental Commissioner offering to provide the Annual Summary Report to MOE each year as part of the ORC's Corporate Annual Report. However, delays in publishing the Corporate Annual Report have prevented formally submitting the Annual Summary Reports (from 1998 to the end of fiscal 2000/01) to MOE.

ORC and MBS agree that it is not practical to link the release of the Annual Summary Report to the publishing of the ORC's Corporate Annual Report as this creates unnecessary delays. The ECO's office is in agreement that there is no need to have the two reports connected. ORC will provide the outstanding reports (including fiscal year 2000/01) to MOE and the ECO as soon as they are printed. In future, ORC will provide the Annual Summary Report to MOE for the fiscal year just ended as soon as it is finalized.

**Beyond the Recommendations – Green Workplace Program**

MBS appreciates the acknowledgment by the ECO of work being undertaken on the Green Workplace Program and will inform the ECO of its progress.

## Cooperation from Ontario Ministries

### MMAH Comment

The ECO has indicated a concern with the cooperativeness of MMAH in *one particular instance*, not all requests from the ECO's office throughout the year. In fact, in every case, MMAH has treated and continues to treat, inquiries from the ECO with the utmost priority, including ECO requests by phone. The Ministry's request in this one instance to have the ECO's research inquiry put in writing was intended to ensure that:

- the ECO's requests (in this instance 14 specific questions) were fully understood, enabling the Ministry to address the specific details of the information being requested; and,
- there was efficiency and expediency in the Ministry's response to the ECO's questions.

### MBS Comment

MBS will continue to make efforts to ensure a good working relationship and communications with the ECO.

## Education

### MOE Comment

The Ministry of the Environment looked at whether the purposes of the *Environmental Bill of Rights* would be achieved by prescribing the Ministry of Education. The Ministry of the Environment concluded:

1. The public notice and comment requirements of sections 15 and 16 of the *EBR* do not apply because the Ministry's policies, Acts or regulations are predominantly fiscal or administrative in nature as described in the *EBR*.
2. The Ministry of Education would have few, if any, environmentally significant policies, Acts or regulations. There are no classes of instrument appropriate to prescribe for the purposes of section 22 of the *EBR*.
3. Few, if any, policies, Acts or regulations could be subject to Part IV (Applications for Review) of the *EBR*. In addition, members of the public may request reviews of ministry activities through other available means, such as writing to the Minister.
4. Alleged contravention of Acts or regulations falling under the Ministry's jurisdiction are unlikely to have environmental effects. As a result, the requirements of Part V (Applications for Investigation) of the *EBR* do not apply.

## Aquaculture and Cage Culture

### MNR Comment

MNR will continue to regulate the aquaculture industry in a manner providing for ecologically sustainable growth, thereby optimizing the economic, social and environmental benefits for the people of Ontario. MNR is also working closely with MOE to find regulatory and policy solutions that do not unduly restrict development of the cage aquaculture industry. The focus however is to maintain and enhance environmental controls that minimize the ecological risks associated with aquaculture.

### MOE Comment

MOE and MNR are working together to ensure the aquaculture industry operates in an environmentally sound manner. MOE is also working with the University of Guelph, the federal government and others to develop improved models for predicting water quality in aquaculture. This working group has recommended a generic sampling and monitoring program to be incorporated into MNR licences.

## Land Acquisition

### MNR Comment

The Province is committed to a goal of protecting its lands and waters, as described in a 1997 document, "Nature's Best – Ontario's Parks and Protected Areas: A Framework and Action Plan".

Southern Ontario activities which contribute to achieving this goal and the protection of natural diversity and special natural heritage values include:

- direct property acquisitions (usually involving partner agencies and usually this is done on a willing seller/willing buyer basis, at appraised market values);
- management of conservation lands and reserves;
- private land trust acquisitions;
- creation of conservation easements;
- municipal, provincial and federal parks; protection through appropriate municipal official plan designations and zoning;
- the provisions of the legislated Niagara Escarpment Plan;
- Ontario's Living Legacy; and,
- many individual public/private land stewardship initiatives.

Programs such as the Natural Areas Protection Program, Ontario Parks Legacy Program, Community Conservancy Program, Eastern Habitat Joint Venture and the Conservation Land Tax Incentive Program also assist with and encourage the protection of natural areas in southern Ontario. Larger non-government organizations such as the Nature Conservancy of Canada and Ducks Unlimited also play a significant role in the protection of significant natural areas in southern Ontario.

With respect to land acquisition activities in southern Ontario, the new $10 million Ecological Land Acquisition Program (ELAP), which will replace the Natural Areas Protection Program (NAPP), starting in 2002 and ending in 2004, will be posted on the environmental registry for comment, as soon as the program parameters are drafted and proposed.

MNR does lead and is involved with a variety of land acquisition/stewardship programs. This is consistent with MNR's mission of ecological sustainability and is consistent with MNR's Statement of Environmental Values.

A coherent province wide acquisition strategy that explains acquisition/stewardship priorities on a geographic basis and the relationships of various provincial programs would be a useful tool for fostering public awareness and understanding of the importance of our natural ecosystems.

## OMAFRA Comment

***EBR* Applications**

OMAFRA will support the Ministry of Municipal Affairs and Housing during the public consultation and development of an action plan for the protection of the Oak Ridges Moraine. OMAFRA is a member of the inter-ministry team of senior staff who will facilitate stakeholder consultations over July and August to determine the government's policy options. Ministry staff will ensure that agricultural and rural interests are considered during the development of the action plan.

# Abbreviations and Acronyms

## Terms & Titles

| | |
|---|---|
| ANSI | Area of natural and scientific interest |
| AQI | Air Quality Index |
| BOD | Biological Oxygen Demand |
| CCP | Community Conservancy Program |
| CCME | Canadian Council of Ministers of the Environment |
| CE | Conservation easement |
| CEM | Continuous emission monitor |
| CITEs | Convention on International Trade in Endangered Species of Wild Flora and Fauna |
| Class EA | Class Environmental Assessment |
| COA | Canada-Ontario Agreement |
| C of A | Certificate of Approval |
| CWS | Canada-wide standards |
| DFO | Department of Fisheries and Oceans |
| EHJV | Eastern Habitat Joint Venture |
| ELAP | Ecological Land Acquisition Program |
| ERCA | Essex Region Conservation Authority |
| GMN | Groundwater Monitoring Network |
| GTA | Greater Toronto Area |
| GTSB | Greater Toronto Services Board |
| IEB | Investigations and Enforcement Branch, Ontario Ministry of Environment |
| IJC | International Joint Committee |
| LfL | Lands for Life |
| MZO | Minister's Zoning Order |
| NAPP | Natural Areas Protection Program |
| NaPP | National Packaging Protocol |
| NASs | Needs Assessment Studies (conducted by MTO) |
| NCC | Nature Conservancy of Canada |
| NELASP | Niagara Escarpment Land Acquisition and Stewardship Program |
| MCBS | Ministry of Consumer and Business Services |
| MczCR | Ministry of Citizenship, Culture and Recreation |
| MCCR | Ministry of Consumer and Commercial Relations (Now MCBS) |
| MEST | Ministry of Energy, Science and Technology |
| MISA | Municipal Industrial Strategy for Abatement |
| MOE | Ministry of the Environment |
| MOH | Ministry of Health |
| MOL | Ministry of Labour |
| MOU | Memorandum of understanding |
| MBS | Management Board Secretariat |
| MMAH | Ministry of Municipal Affairs and Housing |
| MNDM | Ministry of Northern Development and Mines |
| MNR | Ministry of Natural Resources |
| MTO | Ministry of Transportation |
| NAS | Needs Assessment Study, conduction by Ontario's Ministry of Transportation |
| OBBC | Objective-Based Building Code |
| ODWQO | Ontario Drinking Water Quality Objectives |
| OLL | Ontario's Living Legacy |
| OMAFRA | Ontario Ministry of Agriculture, Food, and Rural Affairs |
| OMB | Ontario Municipal Board |
| ORC | Ontario Realty Corporation |
| ORM | Oak Ridges Moraine |
| OPA | Official Plan Amendment |
| OPGI | Ontario Power Generation Incorporated |
| OPL 2000 | Ontario Parks Legacy 2000 |
| ORM | Oak Ridges Moraine |

# Abbreviations and Acronyms

| | |
|---|---|
| OSTAR | Ontario Small Town and Rural Development Initiative |
| OWDC | Ontario Water Directors Committee |
| OWR2000 | Ontario Water Response 2000 |
| PAH | Polycyclic Aromatic Hydrocarbons |
| PCB | Polychlorinated Biphenyl |
| PM2.5 | Particulate Matter under 2.5 micrometres in diameter |
| PMP | Park Management Plan |
| POI | Point of Impingement |
| POO | Provincial Officer's Order |
| PPS | Provincial Policy Statement |
| PRPIR | Procedures for Responding to Pollution Incidents Reports |
| PSW | Provincially Significant Wetland |
| PTTW | Permit to take Water |
| PWQO | Provincial Water Quality Objectives |
| RIGs | Revised Interpretation and Guidelines (related to Condition 77 of the Class EA for Timber Management) |
| SARs | Standardized Approval Regulations |
| SEV | Statement of Environmental Values |
| SLI | Strategic Lands Initiative, Ontario Ministry of Natural Resources |
| SWAT | Soil Water Air Team, Ontario Ministry of Environment |
| TCLP | Toxicity Characteristic Leachate Procedure |
| TDM | Transportation Demand Management |
| TSSA | Technical Standards and Safety Authority |
| USEPA | United States Environmental Protection Agency |
| UTS | Universal Treatment Standards (for hazardous waste under U.S. regulations) |

## Legislation

| | |
|---|---|
| *ARA* | *Aggregate Resources Act* |
| *BCA* | *Building Code Act* |
| *CFSA* | *Crown Forest Sustainability Act* |
| *EAA* | *Environmental Assessment Act* |
| *EBR* | *Environmental Bill of Rights* |
| *ECA* | *Energy Competition Act* |
| *EEA* | *Energy Efficiency Act* |
| *EPA* | *Environmental Protection Act* |
| *FA* | *Fisheries Act* |
| *FIPPA* | *Freedom of Information and Protection of Privacy Act* |
| *FWCA* | *Fish and Wildlife Conservation Act* |
| *GHA* | *Gasoline Handling Act* |
| *GTSBA* | *Greater Toronto Services Board Act* |
| *NEPDA* | *Niagara Escarpment Planning and Development Act* |
| *OFR* | *Ontario Fishing Regulations* |
| *OWRA* | *Ontario Water Resources Act* |
| *PA* | *Planning Act* |
| *PLA* | *Public Land Act* |
| *POA* | *Provincial Offences Act* |
| *TEPA* | *Toughest Environmental Penalties Act* |
| *TSSA* | *Technical Standards and Safety Act* |

# Index


Access to Information
- Cooperation from Ministries, 160
- Instruments, 31
- Proposals, 30

Aggregate Resource Compliance Reporting Program
- 1999/2000 ECO Recommendations, 156

*Aggregate and Petroleum Resources Law Amendment Act*, 125

*Aggregate Resources Act*, 139

Air
- Acid Rain, 35, 71, 101
- Air Quality Reports, 71
- Approval for Discharge to Air, 21
- Ecosystem Impacts, 65
- Electricity, 68, 107
- Air Pollution, 57, 65, 99, 159
- Drive Clean Program, 66
- Federal Government, 100
- Industrial Emissions, 67
- Regulation, 66
- Safety-Kleen, 142
- Smog Plan, 69, 100, 109, 159
- Transportation, 57, 66, 159

Air Standards
- Canada-Wide Standards (CWS), 69, 99
- Provincial Standards (POI), 142, 155
- Standard-Setting, 69, 155
- U.S. Emission Standards, 142, 155

Alpine Plant Foods Corporation, 42

Appeals
- Environmental Review Tribunal, 146
- Instruments, 147
- Leave to Appeal, 146
- Right to Appeal, 146
- Status of Appeals, 147
- Time Periods, 146

Applications for Investigation
- Fisheries Act, 144
- How Many, 131
- Ministries, 130
- Noise, 80
- Odour, 80
- Overview of Applications, 130
- Role of the ECO, 130
- Themes, 132

Applications for Review
- Biosolids (Also see Septage, Sewage Sludge), 80
- CofA Issued Within Five Years, 140
- Hazardous Waste, 105, 139
- How Many, 131
- Landfills, 105, 139
- Mellon Lake Conservation Reserve, 135
- Mining, 135
- Ministries, 130
- Ministry of Education, 165
- Ministry of the Environment, 80, 140
- Ministry of Natural Resources, 135
- Ministry of Northern Development and Mines, 135
- Oak Ridges Moraine, 132, 172
- Overview of Applications, 130
- Role of the ECO, 130
- Safety-Kleen, 139
- Themes, 132

Aquaculture
- Definition, 167
- Cage Culture, 167
- Impacts of Cage Culture on Ecosystem, 167, 170
- Ministries, 164, 170
- Ontario Aquaculture Research and Services Co-ordinating Committee (OARSCC), 169
- Regulation, 164, 169
- Waste Treatment, 168

Areas of Natural and Scientific Interest (ANSIs)
- Information Notice, 39
- Land Acquisition Programs, 175
- Mellon Lake Conservation Reserve, 136
- Ministry Cooperation, 161

*Bill 26* – See *Savings and Restructuring Act*

*Bill 42* – See *Technical Standards and Safety Act*

*Bill 82* – See *Environmental Statute Law Amendment Act*

Biodiversity (Also See Ecosystem Fragmentation)
- Aquaculture, 168
- Land Acquisition Programs, 164, 171
- Southern Ontario, 172

Biosolids (Also see Septage, Sewage Sludge), 80, 154

Black Creek Regional Transportation Management Association, 159

Canada-Ontario Agreement (COA) – Great Lakes, 154

Canada-Wide Standards
Electricity, 69
Hazardous Waste Incinerators, 142
Mercury, 69
Ozone and Fine Particulate Matter, 69, 99

Certificates of Approval
Air Emissions, 21
Alpine Plant Foods Corporation, 42
Application for Review, 139
Aquaculture, 169
Compliance, 82
Incinerators, 139
Hazardous Waste, 139
Landfill Sites, 139
Safety-Kleen, 139
Septage, 51
Sewage Sludge, 52

*Charter of Rights and Freedoms*, 102

Class Actions, 149

C of A – See Certificates of Approval

Comments – See Public Comments

Community Conservancy Program (CCP), 174

Compliance and Enforcement at MOE – See Ministry of the Environment

*Conservation Authorities Act*, 118

Conservation Easements
Generally, 173
Community Conservancy Program, 174

*Conservation Land Act*, 173

Conservation Reserves (Also See Parks), 41, 135, 157, 171, 175

Contact Names
Proposals on the Environmental Registry, 30
Exception Notices, 41
*Environmental Bill of Rights* Coordinators, 160

Contaminants
Air – See Air
Aquaculture, 167
E-coli Bacteria, 84
Inco Refinery, 150

Cooperation from Ministries
Access to Information, 160

Corporate Duty of Care, 102

Decisions Posted on the Environmental Registry
(Also See Environmental Registry)
Unposted Decisions, 33

Data Integration Project, 158, 162

Drinking Water Protection Regulation (Reg. 459)
(Also See Groundwater), 110

Eastern Habitat Joint Venture, 174

Eastern Massasauga Rattlesnake, 162

Ecological Land Acquisition Program, 173, 175

Ecological Sustainability Leadership Program, 162

Ecosystem Fragmentation,
1999/2000 ECO Recommendations, 158
Eastern Massasauga Rattlesnake, 162
Southern Ontario, 172

Ecosystem Monitoring
1999/2000 ECO Recommendations, 157

*E- coli* Contamination, 84

Education
*EBR* Litigation Rights Workshop, 151
Educational Initiatives by the ECO, 22
Environmental Education, 164
Ministry of Education, 164
3R Regulations, 94

Electricity (Also See Energy Efficiency, Air)
Cap and Trade Program, 108
*Electricity Act*, 155
Emission Reporting Regulation, 107, 155
Generators, 107
Ontario Power Generation (OPG), 68, 107
Public Consultation, 107, 155
Smog, 68, 107

Emergency Exception Notice, 41

Endangered Species (Also See Species at Risk)
Eastern Massasauga Rattlesnake, 162

Energy Efficiency
*Act*, 125
1998 Annual Report of ECO, 126
Regulation Amendment, 125
Standards, 125
U.S. Standards, 126

*Energy Efficiency Act*, 125

Environmental Assessment
Class Environmental Assessment, 155, 159
ECO Web Site, 26
Exemption, 38
Information Notices, 38
Park Management Plan, , 113
Hazardous Waste, 140

Landfill, 140
Safety-Kleen, 140
Sales of Government Lands, 154
Terms of Reference, 26
Transportation, 60, 159

*Environmental Assessment Act – EAA*
Exemption, 38
Information Notices, 38
Hazardous Waste, 45, 140, 143
Landfill, 140, 143
Park Management Plan, , 113
Safety-Kleen, 140, 143
Sales of Government Lands, 154
Transportation Planning, 60

*Environmental Bill of Rights (EBR)*
Applications for Investigation, 130
Applications for Review, 130
Class Actions, 149
Educational Initiatives, 22
Environmental Registry, 24, 127
General, 16
Litigation Rights Workshop, 151
Ministries Prescribed under the EBR, 17
Ministry of Education, 164
Proposals on the Environmental Registry, 26, 127
Public Comments, 26, 32
Purpose, 16
Rights Under the EBR, 16, 146, 148
Section 58 – Cooperation from Ministries, 160
Statement of Environmental Values, 16, 18
Suing for Harm to Public Resource, 151
Suing for Public Nuisance, 148

Environmental Commissioner of Ontario – ECO
Applications and Complaints to, 80
Cooperation from Ministries, 160
Educational Initiatives, 22
Ministry Initiatives Discussed in the 1999/2000 Annual Report, 159
Recognition Award, 162
Recommendations Made in the 1999/2000 Annual Report, 152
Role of, 17, 130
Telephone Numbers, 23
Web site 25

Environmental Education, 164

*Environmental Protection Act – EPA*
Kam Kotia Mine, 90
Noise, 80
Odours, 80
Orders Issued, 82
Prosecutions, 144
Septage, 51
Sewage Sludge, 51

Environmental Registry
Access to, 30
Acts, 27, 30
Comment Period, 26
Dated Proposals, 127
Decisions, 32
ECO Web Site, 25
Environmental Assessment Home Page, 26
Environmental Impacts, 31
Exception Notices, 40 (Also See Exception Notices)
Information, Access to, 30
Information Quality, 26
Information Notices, 37 – Also See Information Notices
Information Requirements, 26
Instruments, 29, 31, 32 (Also See Instruments)
Land Sales, 159
Late Instrument Decision Notices, 42
New Acts, 27
New Technology, 24
Permits To Take Water (PTTW), 21, 152
Policies, 28, 30
Proposals, 26, 127 (Also See Proposals)
Public Comments (Also See Public Comments), 26, 32
Recommendations by the ECO in Previous Annual Reports, 26
Regulations, 28, 30
Streamlining Plan, 159
Template, 152
Transportation Planning, 60
Unposted Decisions (Also See Unposted Decisions), 33
What it is, 24

*EPA* – See *Environmental Protection Act*

*Environmental Statute Law Amendment Act (Bill 82)*, 77, 82, 102

Equivalent Public Participation, 41

Exception Notices
Emergency, 41
Equivalent Public Participation, 41
General, 40
Waste Management Facilities, 41

Financial Statement, 178

Fish Farming – See Aquaculture

*Fish and Wildlife Conservation Act*, 115, 169

*Fisheries Act*
Applications for Investigation, 132
Deleterious Substance, 144
Fishing Regulations, 114
Kam Kotia Mine, 90
Marshfield Woods, 118
Violations, 144

Forests
Jefferson Forest, 39
Timber Management, 155
Ecosystem Fragmentation, 158
Ecosystem Monitoring, 158

*Gasoline Handling Act*
Environmental Registry Notices, 120
Groundwater, 87, 153
Technical Standards and Safety Authority 120, 153

Genetically Modified Organisms – GMOs
1999/2000 ECO Recommendations, 157
Aquaculture, 169

Georgian Bay
Eastern Massasauga Rattlesnake, 162

Golf Courses
Marshfield Woods, 116
Public Comment, 117

Great Lakes, 154, 157

Greater Toronto Area (GTA)
Data Integration Project, 158
Transportation and Land Use Planning, 57

Greater Toronto Services Board – GTSB, 62

*Greater Toronto Services Board Act*, 63

Greenhouse Gases
Electricity Sector, 68
Energy Efficiency Standards, 126

Green Workplace Program, 159

Groundwater
Contamination, 84, 87
Depletion, 84
Drinking Water Protection Regulation, 110
Financing of Studies, 86
Management Strategies, 85, 153
Information Systems, 86
Intensive Farming, 153
Monitoring Network, 86, 88, 153, 158
Ontario Small Town and Rural (OSTAR) Development Initiative, 86
Ontario Water Response – 2000, 85
Operation Clean Water, 85
Quality, 84
Mine Closure Plan Amendment, 22
Ministries, 85
ECO Special Report and Brief, 85
Permit to take Water, 87
Progress on ECO Recommendations, 88, 153
Underground Storage Tanks, 87
Water Taking and Transfer Regulation, 83

Habitat Management Strategy, 162

Hamilton
Approval for a Discharge to Air, 21
Horseshoe Carbons Inc., 21

Harm to Public Resource, 151

"Have regard to", 116, 119

Hazardous Waste
Application for Review, 47, 105, 139, 156
Canada-Wide Standards, 142
Definition, 44
"Derived From" Rule, 103
Exemptions, 103
Imports, 45, 140
Lists of Hazardous Wastes and Chemicals, 103
Policy Review, 47
Public Comment, 104
Regulation, 45, 47, 103, 156
Quantities, 45
Safety-Kleen Landfill, 46, 81, 105, 139, 156
Toxicity Characteristic Leachate Procedure, 103
Tracking Movement, 46
Treatment and Disposal, 46
United States, 45, 48, 103, 141
1999/2000 ECO Recommendations, 155

Hunting
Hunting in Parks, 113

Imports
Hazardous Waste, 45, 140

Incinerators
Application for Review, 47, 139, 141
Canada-Wide Standards, 142
Safety-Kleen, 46, 81, 139, 141

Inco Refinery, 150

Information Notices
Emergency, 41
Exception Notice, 40
Ministries, 37
Number Posted, 37
Quality, 39, 40
Use of, 37
Appropriate Use, 39
Inappropriate Use, 38
What Are They, 37

Information on the Environmental Registry – See Environmental Registry

Instrument Classification Regulations
Ministry of Natural Resources, 20, 153
Ministry of Northern Development and Mines, 20

Instruments
Approval for a Discharge to Air in Hamilton, 21
Appeals of, 42, 147
Classifying, 19

ECO Review of Selected Instruments, 21
Late Instrument Decision Notices, 42
Mine Closure Plan Amendment Near Schreiber, 22
Ministry of Natural Resources, 20
Ministry of Northern Development and Mines, 20
Permit to Take Water for Trailer Park, 21
Statement of Environmental Values, 19
What Are They, 19

Intensive Farming (Also See Septage, Sewage Sludge), 153
Special Report of ECO, 153

Internet
Air Quality Ontario Web Site, 34, 71
*EBR* Litigation Rights Workshop, 151
Electricity Generators Emissions Reports, 109
Environmental Assessment Home Page, 26
Environmental Registry, 24
ECO Web Site, 25
Land Sales, 159
Water Quality Reports, 112

Investigations, – See Applications for Investigation

Kam Kotia Mine
1999/2000 Annual Report of ECO, 124, 156
Application for Investigation, 90
Funding for Rehabilitation, 90
General, 89
Ministry of Northern Development and Mines, 91
Objectives, 91
Rehabilitation Proposal, 90

Keele Valley, 149

Lake Huron
Aquaculture, 168

Land Acquisition Programs
Community Conservancy Program (CCP), 174
Conservation Easements, 173
Ecological Land Acquisition Program, 173, 175
Eastern Habitat Joint Venture, 174
Generally, 164, 171
Natural Areas Protection Program (NAPP), 172
Ontario Parks Legacy 2000, 174
Public Participation, 175
Summary of Programs, 175

Landfills
Application for Review, 139
Keele Valley Landfill, 149
Safety-Kleen, 46, 81, 105, 139

Lands for Life, 137, 171 (Also See Ontario Living Legacy)

Liquid Fuels Handling Regulation, 121

Litigation Rights Workshop, 151

Madawaska River Water Management Review, 162

Management Board Secretariat
Cooperation with the ECO, 160
Environmental Registry, 159
Green Workplace Program, 159
Ontario Realty Corporation, 154
Public Land Sales, 154, 159

Marshfield Woods, 116, 171

MCBS – See Ministry of Consumer and Business Services

Mercury, 68, 100

Mellon Lake Conservation Reserve, 41, 135

Milling Operations
Noise and Odours, 80

Mining (Also See *Mining Act*)
Abandoned Mines, 89, 124, 156
Annual Reporting on Rehabilitation, 124
Application for Investigation, 90
Application for Review, 135
Inmet Mining Corp., 22
Interim Protection, 137
Kam Kotia Mine, 89, 124, 156
Mellon Lake Conservation Reserve, 135
Mine Closure Plans, 22, 123
Mine Rehabilitation Code, 122
Mine Rehabilitation Program, 90
Parks, 135
1999/2000 ECO Recommendations, 156

*Mining Act*
Amendments Affecting Instruments, 20
1996 Annual Report of ECO, 122
Part VII, 122
Regulation Amendment, 122
*Savings and Restructuring Act (Bill 26)*, 122
Section 145, 123

Ministry Initiatives Discussed in the ECO 1999/2000 Annual Report, 159
Black Creek Regional Transportation Management Association, 159
Green Workplace Program, 159
Land Sales, 159
Ontario Living Legacy Funding, 159
Smog Alert Response Program, 159
Species at Risk, 159
Streamlining Plan, 159
Transportation Needs Assessment Process, 159

Ministry of Consumer and Business Services – MCBS
Groundwater, 153
Technical Safety and Standards Authority, 120, 153

Ministry of Education
Application for Review, 165
*Environmental Bill of Rights*, 164
Environmental Education, 164
Statement of Environmental Values, 165

Ministry of Energy, Science and Technology,
Consumer Disclosure Program, 108
Environmental Impacts of Proposal, 31
1999/2000 ECO Recommendations, 155

Ministry of the Environment – MOE
Appeals of MOE Instruments, 147
Administrative Monetary Penalties (AMPS), 77
Air Pollution, 67
Air Quality Reports, 71
Air Quality Standards, 143
Air Quality Web Site, 34, 71
Certificates of Approval, 82
Cooperation with the ECO, 160
Compliance and Enforcement, 72, 80
Drive Clean Program, 67
Ecosystem Fragmentation, 158
Ecosystem Monitoring, 157
Guidelines, 76
Groundwater Strategy, 87
Mandatory Abatement Policy, 78
Noise and Odours, 77, 80
Orders Issued, 82
Pollution Hotline, 80
Prosecution Rates, 82
Safety-Kleen, 81
Staff Reduction, 73
Statement of Environmental Values, 16, 19, 161
SWAT Initiative, 78, 153, 157
Timber Management – MNR's Class EA, 155
Voluntary versus Mandatory Compliance, 83
Waste Reduction Office, 92
Water Treatment Plant Inspections, 81

Ministry of Municipal Affairs and Housing – MMAH
Appeals of MMAH Instruments, 147
Cooperation with the ECO, 161
Data Integration Project, 158, 162
Ecosystem Fragmentation, 158
Environmental Registry, 29, 159
Greater Toronto Services Board, 62
Marshfield Woods, 116
Municipal Performance Measurement Program, 61
Oak Ridges Moraine, 134
Responsibility for Transportation Planning, 62

Ministry of Natural Resources – MNR
Aggregate Resource Compliance Reporting Program, 156
Cooperation with the ECO, 160, 161
Ecological Sustainability Leadership Program, 162
Ecosystem Fragmentation, 158
Ecosystem Monitoring, 157
*Fisheries Act*, 144
Groundwater Strategy, 85
Instrument Classification, 120, 153
Madawaska River Water Management Review, 162
Ontario Living Legacy – OLL, 41, 135, 159
Statement of Environmental Values, 16
Timber Management – Class EA, 155

Ministry of Northern Development and Mines -MNDM
Instruments, 20
Kam Kotia Mine, 89, 156
Ontario Living Legacy, 136
1999/2000 ECO Recommendations Regarding Abandoned Mines, 156

Ministry of Transportation
Cooperation with the ECO, 161
Environmental Registry, 60
Needs Assessment Process, 60, 159
Transportation Planning for GTA, 57
Public Participation, 60
Recognition Award, 162
Smog Alert Response Program, 159

Monitoring
Acid Rain, 71
Air Emissions from Electricity Sector, 107
Decisions on the Environmental Registry, 34
Drinking Water, 111
Eastern Massasauga Rattlesnake, 162
Ecosystem, 157
Greater Toronto Area Data Integration Project, 158, 162
Groundwater Monitoring Network, 86, 153, 158
Mine Closures, 123
Need for, 34, 54, 95, 109
Sales of Government Lands, 154
Self-Monitoring, 123
Sludge or Septage Spreading, 54
Smog, 70, 107
3R Regulations, 95

Natural Areas Protection Program (NAPP), 172, 175

Natural Heritage
Ecosystem Fragmentation, 158
Mellon Lake Conservation Reserve, 136
Land Acquisition Programs, 171

Nature Conservancy of Canada (NCC), 174

Niagara Escarpment Land Acquisition and Stewardship Program, 172

Niagara School Boards, 150

Nitrogen Oxides
Electricity Sector Emissions, 66, 107
Industrial Emissions, 67
Transportation Emissions, 66

Noise
Keele Valley, 149
Applications for Investigation, 80
Ministry of the Environment, 77

Northwest Region Fisheries Committee, 114

Nuisances
Keele Valley Landfill, 149
Noise, 149
Odours, 149
Rights to Sue, 148

Oak Ridges Moraine, 57, 133, 154, 171, 176

Odours, 77, 80, 149

Official Plan Amendment (OPA)
Marshfield Woods, 116
Oak Ridges Moraine, 134

Ontario Aquaculture Research and Services Co-ordinating Committee (OARSCC), 169

*Ontario Energy Board Act (OEBA)*
1999/2000 ECO Recommendations, 155

Ontario Hydro (Also See Ontario Power Generation)
*Fisheries Act* Violations, 144

Ontario's Living Legacy – OLL
Areas of Natural and Scientific Interest, 39, 136
Exception Notices, 41
Fisheries, 157
Funding, 159
Land Acquisition Programs, 171, 173, 175
Mellon Lake Conservation Reserve, 41, 135
Mining, 135
Information on Health of Ecosystems, 157
Species at Risk, 136, 159

Ontario Municipal Board – OMB
Oak Ridges Moraine, 134

Ontario Parks Legacy 2000 (OPL 2000), 174

Ontario Power Generation – OPG
Air Emissions, 68, 107

Ontario Realty Corporation
Cooperation with the ECO, 160
Environmental Registry, 159
Compliance with Statutory Requirements, 154
Recommendations by the ECO in the 1998 and 1999/2000 Annual Reports, 154
Sale of Public Lands, 154, 159, 160

Ontario Small Town and Rural (OSTAR)
Development Initiative, 86

*Ontario Water Resources Act – OWRA*
Kam Kotia Mine, 90
Leave to Appeal Permits To Take Water, 148
Provincial Officers' Orders, 82
Right to Appeal, 147

Ozone, 57, 69, 99

Parks (Also See Conservation Reserves)
Land Acquisition Programs, 171
Ontario Parks Legacy 2000 (OPL 2000), 174
Presqu'ile Provincial Park, 113

Particulate Matter, 69, 99

PCBs – See Hazardous Waste

Permits to Take Water – PTTWs
Appeals, 148
Groundwater, 87
Guidelines, 87
Posted on the Environmental Registry, 21
Procedure Manual, 87
Trailer Park, 21

*Planning Act*
Ecosystem Fragmentation, 158
Marshfield Woods, 116
Oak Ridges Moraine, 134
Provincial Policy Statement – PPS, 116

Port Colborne, 150

PPS – See Provincial Policy Statement

Presqu'ile Provincial Park, 113

Proposals Posted on the Environmental Registry, 27
Acts, 28
Dated Proposals, 127
Decisions, 32
Contact Names, 30
Descriptions, 28
Environmental Impacts, 31
Examples, 29
Information Required to be Posted, 30
Instruments, 29, 32
Policies, 28
Public Comments, 26, 32
Regulations, 28

Provincial Policy Statement – PPS
"Have regard to", 116
Natural Heritage, 116, 176
Policy 2.3, 116

PTTWs – See Permits To Take Water

Public Comments
Alpine Plant Foods Corporation, 42
Description of Comments, 32
Electricity Generators, 107
Fisheries, 115
Golf Course, 117
Land Acquisition Programs, 176
Land Spreading of Sewage Sludge, 53
Late Instrument Decision Notices, 42
Marshfield Woods, 117
Mining, 137
Proposals Posted on the Environmental Registry, 26, 32

Regulation 558 – Hazardous Waste, 104, 115
*Technical Standards and Safety Act (TSSA)*, 121
Time Period, 26

Public Lands
Sale of Lands, 154, 159, 160

Public Participation
Environmental Registry, 24, 42
Equivalent Public Participation, 41
Land Acquisition Programs, 175
Ontario Living Legacy – OLL, 41, 136
Safety-Kleen, 143
Sewage and Septage Spreading, 53
Transportation Planning, 60

Public Resource – Harm to, 151

*Public Vehicles Act*, 59

Racetracks
Noise, 80

Recognition Award, 162

Recommendations Made by the ECO in the 1999/2000 Annual Report, 152
Abandoned Mines, 156
Aggregate Resource Compliance Reporting Program, 156
Canada-Ontario Agreement – Great Lakes, 154
Ecosystem Fragmentation, 158
*Electricity Act*, 155
Environmental Registry, 152
Genetically Modified Organisms, 157
Groundwater, 153
Hazardous Waste Facilities, 155
Information on the Health of Ecosystems, 157
Instrument Classification Regulation, 153
Intensive Farming, 153
*Ontario Energy Board Act*, 155
Risk Management in Standard Setting, 155
Sales of Government Lands, 154
Timber Management, 155
Waste Management Regulation, 155

Recycling Plants
Noise and Odours, 80

*Red Tape Reduction Act, 2000*, 23

Registry – See Environmental Registry

Regulation – Instrument Classification – See Instrument Classification Regulation

Regulations
Ontario Fishing Regulations, 114, 169
Proposals for, 28
Regulation 82 – Energy Efficiency, 125
Regulation 127 – Electricity Sector Emissions, 107
Regulation 227 – Electricity Sector Emissions, 107
Regulation 240 – Mines, 122
Regulation 347 – Hazardous Waste, 45, 103
Regulation 459 – Drinking Water Protection, 110
Regulation 558 – Hazardous Waste, 103
Regulation 664 – Aquaculture, 169
Regulation – Septage, 51
Regulation – Sewage Sludge, 52
Regulations – Technical Standards and Safety, 120
Regulation – Waste Management, 45, 103
Regulation – Water Taking and Transfer, 87
3R Regulations, 83, 91

Reviews – See Applications for Review

Right to Sue
Class Action, 149
Harm to Public Resource, 151
Nuisance, 148

*Safety and Consumer Statutes Administration Act*, 120

Safety-Kleen, 46, 81, 139

Sale of Public Land, 154, 159, 160, 174

SARs – See Standardized Approval Regulations

*Savings and Restructuring Act (Bill 26)*, 122

Self-Monitoring
Mine Closures, 123

Septage (Also See Biosolids)
Application for Review, 48
Certificates of Approval 49, 52
Environmental Impacts, 51
Handling, 51
Inadequacies in Rules, 53
Previous Reports of ECO, 49
Regulation of Land Spreading, 49, 51
Rules in Other Jurisdictions, 55
Land Spreading, 51
Treatment, 51
Weak Enforcement, 49

Septic Tanks, 48

SEV – See Statement of Environmental Values

Sewage Sludge (Also See Biosolids)
Application for Review, 49
Certificates of Approval, 52
Environmental Impacts, 50
Guidelines, 53, 154
Handling, 50
Inadequacies in Rules, 53
Land Spreading, 50
Previous Reports of ECO, 49
Regulation of Land Spreading, 49, 52
Rules in Other Jurisdictions, 55
Treatment, 50
Weak Enforcement, 49

Significant Wildlife Habitat Technical Guide, 28, 32

Smog (See Air)

Species at Risk, 136, 159

Spencer Creek, 85

Standardized Approval Regulations – SARs, 53

Standards – See Air Standards, Canada-Wide Standards

Standard-Setting
1999/2000 ECO Recommendations, 155
Risk Management, 155
Public Participation, 155

Statement of Environmental Values
Business Plans, 18
General, 16
Instruments, 19
Ministry of Education, 165
Ministry of the Environment, 19, 161
Ministries, 16, 161

Status of Proposals and Decisions
Proposals with No Decisions, 127

Strategic Lands Initiative (SLI), 174

Sulphur Dioxide, 67

SWHTG – See Significant Wildlife Habitat Technical Guide

Tay River, 148

*Technical Standards and Safety Act (Bill 42)*, 120
*Environmental Bill of Rights*, 120
Environmental Registry, 121
*Gasoline Handling Act*, 120
Minister of Consumer and Business Services, 120
Public Comment, 121
Regulations Under *Act*, 120
*Safety and Consumer Statutes Administration Act*, 120

Technical Standards and Safety Authority
Cooperation with the ECO, 160
Environmental Registry, 29, 121
*Technical Standards and Safety Act (Bill 42)*, 120

Timber Management
1999/2000 ECO Recommendations, 155

Toronto – See Greater Toronto Area

*Toughest Environmental Penalties Act-TEPPA*, 78, 82, 101,153

Trailer Park
Permit To Take Water, 21

Transportation
Black Creek Regional Transportation Management Association, 159
Drive Clean Program, 66
Endangered Species, 162
Environmental Registry, 60
Greater Toronto Services Board, 62
Ministry of Municipal Affairs and Housing, 60
Ministry of Transportation, 59, 159, 162
Municipal Performance Measurement Program, 61
Needs Assessment Process, 60, 159
Responsibility for GTA Transportation Planning, 61
*Public Vehicles Act*, 59
Ride-Sharing, 59
Smog, 57, 66, 159
Solutions – Short-term and Long-Term, 58
Traffic in the Greater Toronto Area (GTA), 57
Transportation Demand Management (TDM), 59

TSSA – See Technical Standards and Safety Authority

Unposted Decisions
Acid Rain Monitoring Network, 34
Air Quality Ontario Web Site, 34
Coal-fired Generating Stations, 36
Environmental Registry, 33
Environmentally Significant, 35, 155
Ministry Cooperation, 161
Monitoring, 34
Ontario Water Response 2000, 34
Transportation Planning, 35

Voluntary Compliance, 78, 82

Walkerton, 78, 81, 84, 153

Waste Management Facilities, 41, 155

Waste Management Regulation, 45, 103, 155

Waste Reduction
Findings of ECO Research Project, 94
3R Regulations, 91
Waste Reduction Action Plan, 92
Waste Reduction Office, 92

Water
Impacts of Aquaculture on Water Quality, 167
Contamination, 81, 84, 167
Drinking Water Protection Regulation, 110
Great Lakes, 154, 157
Groundwater, 84 (Also See Groundwater)
Madawaska River Water Management Review,162
Ontario Living Legacy, 157
*Ontario Water Resources Act – OWRA*, 82, 90, 147
PTTWs – See Permits To Take Water
Treatment Plants, 81

Waterfowl, 174

Water Taking and Transfer Regulation, 87

Web Sites – See Internet

Wetlands
Eastern Habitat Joint Venture (Land Acquisition), 174
Marshfield Woods, 116

Whistleblower Rights, 151

## ECO Staff – 2000 / 2001

Sylvia Adriano – *Policy & Legal Officer*

Karen Beattie – *Legal Analyst*

Donna Bigelow – *Policy & Decision Analyst*

Robert Blaquiere – *Systems, Webmaster & Case Manager*

Darla Cameron – *Policy & Decision Analyst*

Maureen Carter-Whitney – *Legal Analyst*

Ann Cox – *Library Assistant*

Bev Dottin – *Administrative Assistant*

John Ferguson – *Education Adviser*

Rohan Gaghadar – *Policy Analyst/Economist*

Liz Guccione – *Communications/Public Affairs Coordinator*

Greg Jenish – *Policy & Decision Analyst*

Joel Kurtz – *Senior Policy Adviser*

Peter Lapp – *Executive Assistant*

Paul McCulloch – *Policy & Decision Analyst*

David McRobert – *Senior Policy Advisor/In-House Counsel*

Gord Miller – *Commissioner*

Susan Moore – *Researcher*

Mark Murphy – *Public Information & Education Officer*

Cynthia Robinson – *Coordinator, HR, Finance & Admin.*

Damian Rogers – *Researcher*

Ellen Schwartzel – *Coordinator Research & Resource Centre*

Laura Shaw – *Policy & Legal Officer*

Lisa Shultz – *Policy & Decision Analyst*